# APPENDIX B: LAND PROTECTION PLAN FOR DEATH VALLEY NATIONAL PARK

# LAND PROTECTION PLAN FOR DEATH VALLEY NATIONAL PARK

# LAND PROTECTION PLAN SUMMARY

as of 6/2000

**Current Landownership Within Boundary:** Death Valley has approximately 479 miles of boundary (including the 1-mile perimeter of Devils Hole).

| | **Acres** |
|---|---|
| Federal | 3,344,313 |
| State of California | 41,340 |
| Private | 10,519 |
| **Total** | **3,396,172** |

**Acres Remaining to be Protected:** 51,859

**Proposed Protection Methods:** Interim/Cooperative Agreements, Regulation
Permanent- Fee Acquisition, Agreements, Regulation

**Funding Status:** Appropriated to Date: $3,688,640.27
Obligated to Date: $3,663, 640.27
Balance: $25,000.00

| **Top Priority:** | **Tract** | **Acres** | **Reason for High Priority** |
|---|---|---|---|
| | 34-109 (Furnace Creek Wash) | 2,935 | Outstanding scenic area; mining threat; along primary entrance route |

**Planning Team:** Dick Martin, Superintendent, Death Valley National Park
Dennis Schramm, Planner, Mojave National Preserve

**Status of Environmental Compliance:** Categorically excluded.

**Status of Jurisdiction:** Proprietary

# I. INTRODUCTION

## A. DEPARTMENTAL AND NPS POLICIES ON LAND PROTECTION

The use of the federal portion of the Land and Water Conservation Fund (LWCF) is governed by a policy statement issued in May 1982 by the Department of the Interior (47FR19784). The policy requires that each agency using the fund will:

1. Identify the lands or interests in lands that need to be in federal ownership to achieve management unit purposes consistent with published objectives of the unit.

2. Use, to the maximum extent practical, cost-effective alternatives to direct federal purchase of private lands, and, when acquisition is necessary, acquire or retain only the minimum interests necessary to meet management objectives.

3. Cooperate with landowners, other federal agencies, state and local governments and the private sector to manage lands for public use or protect it for resource conservation.

4. Formulate, or revise as necessary, plans for land acquisition and resource use to assure that the socio-cultural impacts are considered and that the most outstanding areas are adequately managed.

In response to this policy, the National Park Service published a final interpretive rule on May 11, 1983 (48FR21121). That rule requires that the National Park Service develop a land protection plan for each unit of the national park system that contain nonfederal lands within the area' s authorized boundary.

The purpose of the plan is to identify methods of assuring the protection of the natural, historic, scenic, cultural, recreation or other significant resources and to provide for adequate visitor use. The plan will be prepared in compliance with relevant legislation, other Congressional guidelines, Executive Orders, and departmental and National Park Service policies. The plan will be clear and concise, prepared with public participation and include full consideration of the alternatives available for land protection. Plans will be updated as necessary to reflect changing conditions.

The major issues to be addressed by the plan are the uses that would be compatible on the remaining nonfederal tracts, the protection methods most usefully employed to avoid incompatible uses and protect Park resources, and the relative urgency of protection action on the various tracts.

Land protection plans are intended to provide general guidance for long-range planning and budgeting, subject to the availability of funds and other constraints. They are not intended in any way to diminish the rights of nonfederal landowners, nor do they constitute an offer to purchase lands or interests in lands.

## B. NEED FOR THE PLAN AND MAJOR ISSUES

Death Valley National Park contains nonfederal lands within the boundaries authorized by Congress. On October 31, 1994, Congress redesignated Death Valley National Monument as a national park and added approximately 1.3 million acres to the unit, creating a Park of 3.3 million acres total. Most of the new Park lands were already public lands, previously administered by the Bureau of Land Management, and jurisdiction over which was transferred to the National Park Service.

The major issues that the land protection plan for each unit addresses are:

1. The extent to which existing and potential uses of private lands and access for such use through and across federal park lands, may adversely affect the natural appearance of the unit, the protection and restoration of natural systems, wilderness integrity and values and cultural sites, objects, and structures.

2. The extent to which existing and potential uses of private lands area may preclude or limit visitor enjoyment of Park resources or may conflict with the aesthetic and ecologic conditions.

3. The extent to which mining activity may affect Park values and resources.

4. The extent to which existing or potential uses of private lands, and access for such uses through and across federal lands may affect species listed as threatened or endangered by the U.S. Fish and Wildlife Service and habitat listed as critical to the survival of the species.

5. The anticipated effectiveness of federal, state, and local regulations in achieving Park objectives on nonfederal lands within the units.

6. The anticipated effectiveness of agreements in achieving Park objectives on nonfederal lands within the units.

7. The anticipated effectiveness of less-than-fee acquisition in achieving protection of Park resources on nonfederal lands within the units.

8. The potential for reservation of use and occupancies when acquiring lands from current owners.

9. The relative urgency of protection among the several areas in the units with nonfederal lands.

# II. PURPOSE OF THE PARK AND RESOURCES TO BE PROTECTED

## A. PURPOSE OF THE PARK

The Act of August 25, 1916, the Organic Act of the National Park Service (16 U.S.C. 1), prescribed that the "fundamental purpose of...parks...is to conserve the scenery and historic objects and the wild life therein and to provide for the enjoyment of the same in such manner and by such means as will leave them unimpaired for the enjoyment of future generations." In the Act of August 18, 1970, Congress declared that the Organic Act provisions, including the statement of fundamental purpose, shall apply to all areas of the National Park System "to the extent that such provisions are not in conflict..." with the statute that specifically applies to that particular area. (16 U.S.C. 1c.(b))

In 1978 Congress amended the 1970 act, cited above, to state that the "authorization of activities" in parks "shall be construed and the protection, management, and administration of these areas shall be conducted in light of the high public value and integrity of the National Park System and shall not be exercised in derogation of the values and purposes for which these various areas have been established, except as may have been or shall be directly and specifically provided by Congress."

The majority of lands within Death Valley National Park are designated by law as wilderness, by the Act of October 31, 1994. The Wilderness Act of 1964 further prescribes the purpose of the wilderness designated lands. That purpose is to preserve lands in their natural condition "for the use and enjoyment of the American people in such manner as will leave them unimpaired for future use and enjoyment as wilderness." The Wilderness Act defines wilderness as "an area where the earth and its community of life are untrammeled by man, where man himself is a visitor who does not remain,...an area of undeveloped Federal land retaining its primeval character and influence without permanent improvements or human habitation, which is protected and managed so as to preserve its natural conditions..."

In summary, the purpose of parks is to preserve the natural and cultural resources so that they can be interpreted, understood and enjoyed by present and future generations.

The development of these land protection plans is being done in conjunction with the general management plan. An initial component in the development of a general management plan is the discussion and description of the specific Park purpose and significance. Elsewhere in this *Environmental Impact Statement / General Management Plan* are complete descriptions of the purpose and significance. Please refer to that section of the document for the specific Park unit purpose and significance.

## B. RESOURCES TO BE PROTECTED

### Natural Resources

This section is a summary of more comprehensive information presented in the 1983 *Natural and Cultural Resources Management Plan*. For more detailed information please refer to that document.

Death Valley National Park is the lowest point in the Western Hemisphere and one of the hottest places in the world. It is also a vast geological museum, containing examples of most of the earth's geologic eras. Here, plant and animal species, some of which occur nowhere else in the world, have adapted to the harsh desert environment. People have also adjusted to these severe conditions, as evidenced by extensive archeological sites, historical sites related to successive ways of prospectors, miners, and homesteaders,

present-day residences of Native Americans, and even the current styles of resort developments and active mines.

The size of the Park and the diversity of its resources make the area difficult to characterize. The salt pans of the main valley, the surrounding canyons, the unique plants and animals, and the various historical sites all represent a portion of the national park, but no single feature typifies the whole Park. The assemblage of diverse natural and cultural resources, and the legends and fantasies that have evolved about the pioneers — including Death Valley Scotty — are all part of the visitor experience.

Perhaps the Park' s greatest assets today are the clear air, vast open spaces that stretch toward distant horizons, and the overwhelming silence. About 1.2 million people a year (1997 numbers) come to Death Valley to experience the stark and lonely vastness of the valley; the panorama of rugged canyons and mountains; the pleasures of the dry, warm winter climate; the challenge of the hot, arid summer; the relief of the cooler mountains; and the reminders of frontier life.

Death Valley National Park includes nearly 120 miles of Death Valley, a 156-mile-long north/south-trending trough that formed between two major block-faulted mountain ranges: the Amargosa Range on the east and the Panamint Range on the west. Telescope Peak, the highest peak in the Park and in the Panamint Mountains, rises 11,049 feet above sea level and lies only 15 miles from the lowest point in the United States in the Badwater Basin salt pan, 282 feet below sea level.

The Amargosa Range, which forms the eastern wall of Death Valley, includes three mountain groups from north to south: the Grapevine Mountains (average elevation of the mountain crest is 7,000 feet), the Funeral Mountains (4,000 feet average crest elevation), and the Black Mountains (5,300 feet average crest elevation). The western slopes of all these mountain groups are precipitous and are cut by steep-walled canyons. Both the Funeral and the Black mountains are relatively treeless and arid.

The Panamint Range on the west side of Death Valley includes the Cottonwood Mountains to the north (average crest elevation 6,000 feet) and the Panamint Mountains to the south (average crest elevation over 8,000 feet). Long, sheer-walled canyons cut the eastern slopes of the mountains. Broad basins such as Harrisburg, Nemo, and White Sage flats, Wildrose Canyon, and Butte Valley contrast sharply with the ruggedness of the surrounding terrain. The Cottonwood Mountains include smaller isolated north-south trending mountains lying between Sand Flat, Hidden Valley and Racetrack Valley. These valleys are small basins with no drainage outlets, and each contains a small, silt-floored dry lake.

Large aprons of gravel (alluvial fans) lie against the mountains. These alluvial sediments deposited in Death Valley during the past several million years are sands and gravels removed by flash floods from the adjacent mountains. There are obvious differences in the sizes of the alluvial fans on the opposite sides of the valley; fans of the higher Panamint Mountains to the west are larger than the fans of the Black Mountains to the east.

The Death Valley hydrologic basin encompasses about 8,700 square miles in California and Nevada (Hunt and Mabey 1966). It is a closed basin and all surface drainage is internal; no streams exit the valley. Various rock types within the hydrologic basin affect regional surface and groundwater systems. Groundwater recharge on the east side of the Park is from local precipitation and underflow from drainage basins far beyond the Park boundary. Recharge from the west is due to local precipitation and snow retention in watersheds of the Panamint and Cottonwood mountains. Known surface water sources in the Death Valley region include potholes, seeps, wells, springs, and ponds. To date, 330 water sources of varying dependability and quality have been recorded within the Park.

The diversity of Death Valley National Park's plant communities result partly from the region's location in the Mojave Desert, a zone of tension and overlap between the Great Basin Desert to the north and the Sonoran Desert to the south (Kearney and Peebles 1960). This location, combined with the great relief found within the Park — from 282 feet below sea level to 11,049 feet above sea level — supports vegetation typical of four biotic life zones: the lower Sonoran, the Canadian, and even the Arctic/Alpine in portions of the Panamint Range (Jepson 1923; Storer and Usinger 1968). Based on Munz and Keck (1968) classifications, seven plant communities can be categorized within these life zones, each characterized by dominant vegetation and representative of three vegetation types: scrub, desert woodland, and coniferous forest. Microhabitats further subdivide some communities into zones, especially on the valley floor.

### Scrub or Desert

Scrub is the most extensive vegetation type in Death Valley. It dominates about three-fourths of the Park landscape and includes the alkali sink, creosote bush scrub, shadscale scrub, and sagebrush scrub communities. The alkali sink or salt flat community occurs in the lower elevations of the Park.

### Desert Woodland

Desert woodland is an open, well-spaced community ranging from elevations of about 7,000 feet up to about 9,500 feet. Much of the soil within this community is bare and surfaced with a hard, wind scoured layer similar to desert pavement. The community is dominated by single-leaf pinyon pine (*Pinus monophylla*) and scattered individuals of juniper (*Juniperus osteosperma*).

### Coniferous Forest

Coniferous forest in Death Valley National Park includes subalpine forest and some bristlecone pine forests. Both communities occur in narrow belts at upper elevations. Dominants of subalpine forest including limber pine *(Pinus flexilis),* occur in mosaic concentrations rather than uniformly throughout the area. The bristlecone pine forest community occurs chiefly above 10,000 feet in the Panamint Range, where spacing of individual bristlecones *(Pinus aristata)* and limber pine *(Pinus flexilis)* appear more as an open woodland rather than a forest.

### Wildlife

Death Valley National Park and the adjacent desert support a variety of wildlife species. Within Death Valley and the surrounding desert there are 51 species of native mammals, two species of exotic mammals, well over 346 species of birds, 36 species of reptiles, three species of amphibians, and six species of fishes (Hansen 1972 and 1973; Landye 1973). Small mammals are more numerous than large mammals, such as desert bighorn, bobcat, mountain lion and mule deer. An estimated 200 to 250 mule deer are present in the pinyon/juniper associations of the Grapevine, Cottonwood, and Panamint mountains.

The Nelson bighorn *(Ovis canadensis nelsoni)* is the subspecies native to Death Valley. Bighorn occur in desert mountain ranges where the terrain includes rolling hills for feeding areas and nearby cliffs within steep canyons that can be used for escape. Their range does not correlate with any specific vegetative type. The present population is estimated at 520 and appears to be declining. The cause of the decline has not been determined; however, several factors may be involved, including the introduction of diseases from livestock, poor range conditions, rapid increase in human activities (such as mining, road building, urbanization, and increased recreation), illegal hunting, and appropriation of water (Seymour 1972). Competition with other animals and drying of springs are additional factors resulting in loss of habitat. To reduce visitor impacts and prevent undue disturbance of wildlife, backcountry camping is not permitted within .25 mile of springs.

### Endangered, Threatened, Endemic, or Rare Plants and Animals

Four plants found in the Eureka Dunes area of Death Valley National Park have been officially listed as endangered or threatened by the U.S. Fish and Wildlife Service. In addition, the spring-loving centaury, a threatened plant species, is found at Travertine Spring. Numerous other species are considered "sensitive" due to their limited distribution, endemism to Death Valley, or other factors.

The California Native Plant Society has compiled locality information for many of these species (see 1983 *Natural and Cultural Resources Management Plan,* California Native Plant Society 1976, 1978). A preliminary report from the late 1970s entitled, "Rare Plant Studies: An Inventory of the Endemic, Threatened and Endangered Plants of Death Valley National Park," is available to the staff for management purposes. NPS *Management Policies* provide special consideration for unique (endemic) or rare species.

The peregrine falcon and Devils Hole pupfish are listed by the U.S. Fish and Wildlife Service as endangered species. California and Nevada have listed additional species as rare or fully protected under state program, based on degrees of endangerment to populations and their habitat. The 1982 plan lists animals with special federal or state classification and whether they are endemic to Death Valley.

Numerous species of aquatic mollusks (snails) are known to be endemic to Park waters (see Appendix C: Species of Special Consideration). Endemic insects occur at Saratoga Springs and Devils Hole. Systematic inventories of the Park have not been made for additional endemic species.

### Air Quality

Death Valley National Park is classified as a Class II clean air area (42 U.S.C. 7401 et seq.). Under this classification, a moderate amount of industrial activity may be permitted by the state in the vicinity of the Park as long as the maximum allowable increases over baseline concentrations established for sulfur dioxide and particulate matter are not exceeded. In 1980 it was determined that Death Valley possesses important air quality attributes, and the Park was listed for possible redesignation as a class I area, pursuant to section 164(d) of the Clean Air Act. The important attributes include visibility (vistas of salt flats, sand dunes, and distant mountain ranges are integral to the visitor experience) and plants (some species, such as desert holly, are sensitive to ozone and other pollutants). Redesignation to class I would mean more stringent standards for sulfur dioxide and particulate matter, and resource protection requirements would be specified.

Major nearby sources of pollution are the Searles Valley (Trona) complex, which is 20 miles to the southwest, and the Clay Camp colemanite processing facility, which is 10 miles to the east. The Searles Valley complex produces soda ash, borax, potash, and other chemicals. Cyclones and electrostatic precipitators are used at Trona to control particulate emissions, and scrubbers are used to remove sulfur dioxide. The long-range transport of air pollutants, particularly ozone, is also a problem. Ozone originates from precursors, such as volatile organic compounds and nitrogen oxides, from as far away as the San Joaquin Valley and perhaps the Los Angeles basin.

### Mineral Resources

Mineral deposits of known economic value are limited to talc and borates. Most of the talc production came from a talc-bearing belt from the Warm Spring and Galena canyons in the southern portion of the Panamint Range. Additional economic talc deposits occur in the southeastern portion of the Park in the Ibex Hills vicinity. Borate deposits occur in the Furnace Creek Wash area. The few metal deposits that proved profitable are exhausted. At this time no metal mines are in production inside the Park.

Early mining activity (1870 to 1940s) included a few town sites and mills as well as mine shafts and dumps. While surface disturbances were usually small and confined to a few acres because most mines were underground, numerous small exploration pits and adits were widely scattered over the area. With the advent of machinery capable of moving large volumes of material in a short time, the character of mining in Death Valley changed, and surface mines became predominant in the early 1970s. The largest open-pit mine within the Park is American Borate Company's Boraxo Mine, a borate operation which has been mined out. This mine covers approximately 250 acres and the deposit was mined to a depth of about 400 feet. Other inactive open-pit mines in the monument include another borate mine in Furnace Creek Wash, five talc mines in the area of Warm Springs and Galena canyons, and one talc mine in the Ibex Hills.

## Cultural Resources

### Archeology

Although it is estimated that only about 6 percent of the lands within the boundaries of pre-1994 Death Valley National Monument (and an even smaller proportion of the lands added to the monument in 1994) have been surveyed for archeological resources, the overall cultural sequence is well documented. In particular, the archeological research and survey efforts of Hunt and Wallace, conducted primarily during the 1950s and 1960s, have formed the bulk of extant data about prehistoric native cultures. Nearly 2,000 archeological sites, covering some 10,000 years of human activity (Pleistocene Era; Lake Mojave Period, 10,000–5000 B.C.; Pinto Period, 5000–2000 B.C.; Gypsum Period, 2000 B.C.–500 A.D.; Saratoga Springs Period, 500–1200 A.D.; Shoshonean Period, 1200 A.D.–Euro-American Contact) have been identified. Site types include: house circles; habitation areas, complex sites; rockshelters; campsites; workshops; quarries and lithic scatters; hunting blinds; plant food processing stations; storage pits; cemetery and burial areas; rock art (petroglyphs/pictographs); rock alignments; and rock traps or caches. Areas of particular archeological significance within the Park boundaries include Butte Valley, Mesquite Flat, the floor of Death Valley, Grapevine Canyon, high elevation localities in the Panamint Mountains, alluvial fans on the west side of Death Valley, and springs.

Euro-American historic archeological sites are generally associated with transportation networks and resource procurement/exploitation features. In the Park, transportation routes, water sources, and mining operations are prime locations where such archeological sites may be found.

No prehistoric archeological sites or districts within the Park boundaries are listed on, or have been determined eligible for listing on, the National Register of Historic Places. Draft national register nomination forms for archeological districts in the Park have been prepared for the following: Butte Valley, Mesquite Spring, Racetrack-Goldbelt, Ubehebe Crater, Upper Emigrant, Upper Panamint, Death Valley Salt Pan, Furnace Creek, Mesquite Flat, Grapevine Canyon, Ibex Spring, Keane Wonder Mine, Saratoga Springs, and Scotty's Ranch. The National Park Service is planning to prepare national register nomination forms for the Lower Vine Ranch, Furnace Creek Wash, Saline Valley, and Eureka Valley archeological districts.

### History

The first Caucasians known to have entered Death Valley were adventurers seeking a shortcut to the northern California goldfields during the winter of 1849–50. The infamous name Death Valley characterizes the suffering and anxiety endured during their wanderings through the inhospitable region. With the exception of scattered railroad and General Land Office surveyors in the 1850s, the valley remained largely unvisited until rumors of its possible mineral riches spread through the West during the 1850s and 1860s. Lack of documented information on the region prompted a government-sponsored California/Nevada boundary survey in 1861 as well as military expeditions led by Cavalry Lieutenant

Charles E. Bendire in 1867 and George M. Wheeler in 1871 and 1875. The most productive expedition was the U.S. Department of Agriculture's Death Valley Expedition headed by C.H. Merriam in 1891.

Mining booms began at Panamint City, Darwin, Lookout, and Chloride Cliff in 1873. Both booms were short lived, but they attracted large numbers of prospectors into the Death Valley region. After 1900, more miners and prospectors seeking mineral riches spread throughout the area from Nevada mining camps. Although many camps within what is now the national park proved to be only prospects and quickly folded, two gold mines — the Skidoo and the Keane Wonder — were significant producers.

Borate minerals concentrated on the floor of Death Valley and in surrounding areas were a source of substantial mineral wealth. The first borax mine in the valley was the Eagle Borax Works that operated from 1882 to 1884, while the later Harmony Borax Works (1883–88) popularized Death Valley with the famous 165-mile 20-mule team wagon run to the railhead at Mojave. Other borax deposits were discovered in Saline Valley and at Ryan, and in 1911 the Saline Valley salt deposit was developed. During subsequent years, its salt production would be transported over the Inyos via an engineering marvel known as the salt tram.

In 1933, Death Valley National Monument was established, and the valley soon became the focus of increasing tourism and recreational development. Significant administrative and visitor use facilities were constructed by the Civilian Conservation Corps during the Depression. Scotty's Castle and the widely-reported antics of Walter Scott ("Death Valley Scotty") contributed to the growing tourist industry in the region.

Death Valley possesses significant historic sites that represent a continuum from the mining activities of the 1860s to the present-day. Six historic period properties in the Park are listed on the National Register of Historic Places:

- Skidoo
- Harmony Borax Works
- Eagle Borax Works
- Saline Valley Salt Tram Historic Structure
- Leadfield
- Death Valley Scotty Historic District

Five historic properties in the Park have been determined eligible for listing on the National Register of Historic Places:

- Residential, Administrative, Maintenance, and Visitor Use Facilities in Death Valley National Park Built by the Civilian Conservation Corps: Camp Wildrose Historic District, Cow Creek Historic District, Emigrant Junction Comfort Station, Park Village Comfort Station, Texas Spring Campground Comfort Stations and stone picnic tables
- Original Bullfrog-Bullfrog West Extension Mine
- Homestake-King and Gold Bar Mines and Mills
- Las Vegas and Tonopah Railroad Grade
- Lee Historic District

Seventeen draft national register nomination forms have been prepared for the following properties in the national park in connection with the aforementioned *Historic Resource Study: A History of Mining*. The forms have been submitted to the Pacific-Great Basin Support Office in San Francisco, but no formal determinations of eligibility have been processed for them:

- Big Talc Mine
- Garibaldi Mine
- Gold Hill Mill
- Harrisburg Historic District
- Hungry Bill's Ranch Historic District
- Journigan's Mill
- Lemoigne Mine and Cabin
- Lost Burro Mine and Mill
- Panamint Treasure Mine
- Queen of Sheba Mine
- Wildrose Canyon Charcoal Kilns
- Chloride Cliff Historic District
- Echo Canyon Historic District
- Greenwater Historic District
- Keane Wonder Historic District
- Corduroy Road
- Furnace Creek Wash Historic District

Three draft national register nomination forms have been prepared for the following historic properties in the lands that were added to the national monument in 1994:

- Barker Ranch
- Panamint City
- Gem Mine and Mill

Four draft national register nomination forms were prepared by the Timbisha Shoshone Tribe through a NPS Historic Preservation Grant:

- Mushroom Rock
- Ubehebe Crater
- Navel Spring
- "Tumpisa" District (Furnace Creek area)

Draft national register nomination forms for archeological districts in the national park that have been prepared include: Butte Valley, Mesquite Spring, Racetrack-Goldbelt, Ubehebe Crater, Upper Emigrant, Upper Panamint, Death Valley Salt Pan, Furnace Creek, Mesquite Flat, Grapevine Canyon, Ibex Spring, Keane Wonder Mine, Saratoga Springs, and Lower Vine Ranch.

The National Park Service is planning to prepare national register nomination forms for archeological districts such as Furnace Creek Wash, Saline Valley, and Eureka Valley.

# C. PARK HISTORY AND OTHER FACTORS RELEVANT TO PROTECTION PARK RESOURCES

Death Valley National Monument was established by presidential proclamation under the Antiquities Act of 1906, on February 11, 1933 (Proclamation No. 2028). The original Monument contained approximately 1,601,800 acres. Supplementary proclamations in March 1937 (No. 2228) and January 1952 (No. 2961) increased the Monument's acreage to 2,067,793 acres. The Monument was subsequently changed to Death Valley National Park by Congressional action on October 31, 1994, with the passage of the California Desert Protection Act (16 U.S.C. 410aaa-83). Approximately 1.3 million acres of new lands were added, bringing the total acreage of the new Park to 3,396,172 acres. Nearly 95% of the Park was designated as wilderness by that same act. Specific limitations and directions were provided by Congress in the CDPA relevant to land acquisitions in the Death Valley National Park. The following list summarizes to specific direction and cites the appropriate section of the act:

- Sec. 306b provides that persons holding grazing permits that are willing to convey base property to the United States be given priority over the acquisition of other lands within the Park.

Three provisions in the CDPA that affect land acquisition are applicable to both Death Valley and Mojave, as well as BLM wilderness areas:

- Sec. 707 directs the Secretary to enter into negotiations with the State Lands Commission to exchange Federal lands or interests for State School lands or interests that are within Parks and wilderness areas.
- Sec. 710 provides that "lands or interests in lands acquired under" the California Desert Protection Act "shall be appraised without regard to the presence of a species listed as threatened or endangered pursuant to the Endangered Species Act of 1973 (16 U.S.C. 1531 et seq.)."
- Sec. 901 imposes a ceiling of $300,000,000 for all land acquisition costs associated with the three National Park Service administered areas (including Death Valley, Mojave and Joshua Tree) and the Bureau of Land Management administered wilderness areas created by the California Desert Protection Act.

NPS *Management Policies* (1988) provide that the National Park Service will seek to eliminate valid mining claims and nonfederal mineral interests in wilderness areas through acquisition.

# D. MANAGEMENT OBJECTIVES

## Visitor Services

- Ensure that authorized commercial uses of Death Valley National Park are compatible with the preservation and safe enjoyment of the resources.

- Provide for overnight visitor accommodations as well as campgrounds, food service, potable water, and staff housing facilities within limits of preservation objectives and environmental, hydrological, physical, and social factors; encourage the development of overnight facilities and related services by private inholders and private enterprises outside the Park.

- Provide visitors with the opportunity to discover, explore, and understand the natural and cultural resources of the Park through interpretive programs, facilities, and activities that emphasize the complex and fragile desert ecosystem, the interaction between the desert resources/environment and man, and the vulnerability of the desert environment to human impact.

- Preserve, operate, and manage Scotty's Castle, its grounds, and environs to recreate the atmosphere of the period of its construction and occupation by Walter Scott and Mr. and Mrs. Albert Johnson.

### Visitor Use

- Encourage visitors to explore the backcountry, to experience the wilderness of the high Panamint, Grapevine, Cottonwood, and Funeral Ranges, and to camp and sightsee in a setting of climatic relief from the valley floor.

- Provide a wilderness experience for those who desire it, in balance with the limitations of the fragile resources.

### Safety

- Provide for visitor and employee safety through an ongoing safety program that recognizes the hazards of heat, humidity, flash floods, and the physical hazards of mine areas.

### Management

- Encourage the perpetuation of Death Valley's native Indian cultural heritage and work toward adequate standards of living in the Timbisha Shoshone village. Relate interpretation and activities to the purposes of the Park.

- Encourage the use of Death Valley's resources as a center of scientific research interest, consistent with the perpetuation of native natural processes.

- Cooperate, as much as possible, with other federal agencies (Bureau of Land Management, Department of Defense, etc.), state and local agencies, mining companies, and private inholders on management programs, studies, planning, and extraction of minerals as authorized and by approved methods.

### Resource Management

- Maintain, preserve, and perpetuate the aesthetic setting and the natural and cultural resources of Death Valley National Park.

- Restore conditions conducive to the perpetuation of the natural processes as they functioned before disruption by technological people or competition from nonnative plants and animals.

- Restore native plants and animals to their original range.

- Restore a natural appearance to the land surfaces disturbed by people, recognizing that significant cultural values must be preserved.

- Ensure the perpetuation of rare and endangered plants and animals and those species endemic (specific) to Death Valley National Park.

- Perpetuate the Devils Hole pupfish in the detached Devils Hole section of the Park.

- Minimize the adverse effects of mining and prospecting that conflict with the preservation and public appreciation of natural and cultural values.

# III. NONFEDERAL LANDOWNERSHIP AND USE

## A. DESCRIPTION

There are approximately 52,000 acres of nonfederal lands within the boundaries of Death Valley National Park. Of the nonfederal land, 41,340 acres are owned by the state of California and 10,519 acres are owned by other private parties. In addition, about 2,871 acres of the Park are encumbered by private mineral interests associated with unpatented mining claims.

Detailed tables listing tracts are found in the following tables at the end of this section:

1. Patented mining claim groups
2. Unpatented mining claims
3. Appropriated water rights

### 1. State Lands (41,340 acres)

The Statehood Act of 1850 granted to the state of California all unappropriated and surveyed sections 16 and 36, including those in the area later included in the Park. Most of the state land included within the old monument boundary has been acquired by the National Park Service through exchange. However, the expansion of the Park in 1994 brought several new state school sections into the Park. The California Desert Protection Act requires the National Park Service to give priority to exchanging these parcels out of the parks, and an active program is currently underway to achieve that objective. In 1998, 12,872 acres of state land were acquired by exchanges. Eighty-two parcels of various sizes remained as of June 1998, totaling 41,340 acres.

### 2. Private Lands (10,519 acres)

About 60% of the private lands within Death Valley are patented mining claims. There are patented mining claims totaling 6,311 acres. Other private lands exist in seven areas of the Park and total 4,208 acres.

The private lands may be grouped into twelve areas as summarized below.

| | Tracts | Acres |
|---|---|---|
| 1. Lower Furnace Creek | 13 | 2,935 |
| 2. Upper Furnace Creek | 24 | 1,067 |
| 3. Bullfrog Hills, Big Bell, Inyo Gold | 8 | 442 |
| 4. Warm Spring Canyon, Skidoo | 7 | 270 |
| 5. Amfac Properties (Furnace Creek) | 2 | 342 |
| 6. Amargosa Valley | 2 | 1,920 |
| 7. Saline Valley | 3 | 1,263 |
| 8. Panamint Springs | 2 | 260 |
| 9. Jackass Flat (Saline Range) | 1 | 155 |
| 10. SW Funeral Mountains | 1 | 228 |
| 11. Goler Canyon | 1 | 40 |
| 12. Other mining claim groups | Unknown | 1700 |
| **TOTAL** | **64** | **10622** |

The priority areas are discussed in detail below:

1. Lower Furnace Creek. Furnace Creek Wash is a relatively flat, gently sloping drainage containing an ephemeral braided stream channel, with elevations ranging from 2,800 feet at its head to near sea level at the mouth at the head of the alluvial fan.

   The entire Furnace Creek Wash area is fully visible to visitors entering Death Valley from the east on Highway 190. This is the most heavily used access into the Park. Except for partially reclaimed dumps of the Boraxo Mine (open pit) and the headframe area of the Billie underground mine (just outside Park boundaries) the view of the Furnace Creek area from Highway 190 is relatively free from disturbance by people' s activities. Undisturbed vistas of the broad wash and colorful surrounding mountains offer visitors an imposing visual introduction to Death Valley.

   The eroded badlands, adjacent to Highway 190, present a colorful and bizarre vista for visitors entering the Park along this corridor. Zabriskie Point, bordered on the south, north and west by patented U.S. Borax claims is one of the most visited and scenic points in the Park.

   The Twenty Mule Team road through the badlands is the major visitor interest point in the lower Furnace Creek area aside from Zabriskie Point. The road, for the most part, is located on patented claims owned by U.S. Borax. Visitors traveling this three-mile road are afforded an intimate glimpse of the badlands, essentially undisturbed except for the small early mine development.

   The Monte Blanco borate mine, which appears to have experienced some late development in the early 1950s, and the assay office site in Twenty Mule Team Canyon have been determined to be eligible for inclusion on the National Register of Historic Places. The area contains the original colemanite discovery in Death.

   Highway 190 has significance in Furnace Creek Wash as the route followed into Death Valley by early gold seekers searching for a short cut to California gold fields.

2. Upper Furnace Creek Wash. Upper Furnace Creek Wash contains much of the United States known colemanite resources. The Boraxo was the first open pit mine of any significance in the Park. The Boraxo pit and dumps cover nearly 260 acres. The pit is not visible from normal visitor travel routes and recontouring of the waster rock dumps serves to mitigate most of the adverse impact on the visibility.

   The Dantes View road, through the upper Furnace Creek area, provides access to major scenic and visitor interest points in the Black Mountains. The overlook at Dantes View provides more than 90,000 visitors annually with an easily accessible panorama of Death Valley, unexcelled elsewhere in the Park. This section of the Dantes View road is similar and in some places identical to that part of the route from the upper Furnace Creek area to Greenwater and Shoshone, California, shown on an early edition of the Furnace Creek Quadrangle, surveyed 1905 to 1906. The public road route probably predates any of the mining claims currently incorporating any portion of the Dantes View road. Other than the Billie underground mine surface plant and development waste dump and the surface development at the historic Ryan mines, which are outside the Park, the most visible evidence of mining along the Dantes View road is the existing Sigma Mine waste dump and stockpile one-half mile from Dantes View road.

Desert bighorn sheep inhabit range to the southwest, west and northeast. The upper Furnace Creek area is known to be a route of travel between range and water sources. Bighorn sheep have been observed in the Furnace Creek area moving northeast to southwest and southwest to northeast.

Features of historical significance in the upper Furnace Creek area are limited to the Ryan Mines and railroad grade (outside the Park) which served the mines until the 1920s, and a few trash heaps and a gypsum wall of unknown origin adjacent to a gypsum outcrop on the Park's east boundary, 2.5 miles south of Highway 190.

3. Bullfrog Hills, Big Bell, Inyo Gold. The Big Bell Mine was discovered in 1904 and worked mostly in the 1930s. The property contains an extensive assortment of mining equipment as well as standing structures that have known great potential significance in illuminating the operation of a small, remote mine.

   The Inyo Gold Mines include:

   - Schwab, a mining campsite in the Funeral Mountains, includes the mines and associated artifacts. It was nominated to the national register in 1980.

   - Echo Canyon Townsite, a short-lived mining camp dating from about 1907, is often confused with Schwab. The site does not possess historical significance.

   Furnace Mine is a property that is patented and possesses some interesting remains, including a dragway with winch and a crude smelter.

   Inyo Mine a complex dating primarily from the 1930s, but it originated during the Bullfrog-Rhyolite boom early in the century.

   The Bullfrog Hills area lies 25 miles north of headquarters at Furnace Creek. This portion of Death Valley lies in the state of Nevada is referred to as the "Nevada Triangle." The "Nevada Triangle" contains low hills and basins and does not provide unique landforms, scenery or natural phenomena to the extent provided by other areas in Death Valley. However, the opportunity to observe a large, ecologically intact expanse of the Mojave Desert is unexcelled elsewhere in the region.

   The Original Bullfrog Mine is a patented property near Rhyolite that is significant because its discovery touched off a major mining boom and early 20th century development of the Bullfrog Mining District. It is probably the single most significant mining site in Death Valley from the standpoint of historical occurrence, although the structural remains above ground are not impressive. It was listed on the National Register of Historic Places in 1980. The Homestake-King Mine was a major mining complex that included a massive mill in the Bullfrog Mining District. Only ruins and foundations of the mill stepped down a Mountainside remain, along with the usual shafts and remains of smaller structures. The mere size of the plant suggested by its remains indicates that it was probably historically significant. It was listed on the National Register of Historic Places in 1981.

   The proximity of the Gold Bar and Homestake-King properties is fortuitous since they represent opposite extremes in turn of the century mining efforts. The Homestake was a relatively honest operation while the Gold Bar was riddled by fraud. The properties are of

further significance because they are the sites of the only mills constructed during the Bullfrog boom within the present day Park boundaries.

4. Warm Spring Canyon, Skidoo. An ore processing mill in the canyon possesses historical significance. Warm Spring, one of the two best springs in the Park, south of Telescope Peak, is on Continental' s GOLD HILL NO. 2 MILL SITE claim. Flow is approximately 50 gallons per minute of 94 degree Fahrenheit water. The presence of a perennial source of surface water with nearly constant discharge has created a very special oasis in the desert. Nearly two acres at Warm Spring is covered by a growth of wild grape, *Vitis californicus*, and giant reed, *Phragmites communis*. It is more than two miles to each of the next three closest springs, to the south, west and north.

   Skidoo was founded in 1906 in the Panamint Mountains. This site consisting of the remains of a town, graves, mines and prospects, a stamp mill, and pipeline — probably representing the most significant mining community within the Park. This site was listed on the national register in 1974.

5. Amfac Properties. The two Amfac Properties, Furnace Creek Inn and Ranch, comprise an extensive constructed oasis. Together they offer a full range of resort facilities, including golf, tennis, swimming, horseback rides, and entertainment. There are several restaurants, laundry and shower facilities, a general store, post office, and gas station. The privately owned Borax Museum within Furnace Creek Ranch displays artifacts related to mining. An airstrip (lighted for night use) is adjacent to the ranch. Many visitors assume the ranch is an NPS concession and bring their problems to the Park staff. Although the Park Service has no authority over the operations, the owner and the Park Service cooperate in resolving problems of mutual interest.

6. Amargosa Valley. Two private parcels totaling 1,920 acres occur in the valley east of the Funeral Mountains and about 6 miles west of Highway 127, about a mile from the state line. The parcels occur on a gently sloping creosote bush slope that is within designated wilderness. The Amargosa River channel traverses the center of the parcel and numerous wells are shown on the USGS quadrangle. Some mining prospects are also shown. Current threats are unknown.

7. Saline Valley. Three parcels totaling approximately 1,263 acres occur along the Saline Valley road at the mouth of Hunter Canyon. The parcels occur on the valley floor north of the Salt Lake and include several hundred acres of mesquite groves and salt pan vegetation. One 40-acre parcel includes mostly area shown as water on the USGS quadrangle. The area is extremely fragile and highly visible to visitor traffic in Saline Valley. The parcels are entirely excluded from wilderness. Current threats are unknown.

8. Panamint Springs. There are two private parcels at Panamint Springs, along State Highway 190. One 40-acre parcel is partially developed with a restaurant, small hotel, airstrip, gas station, and small camping area. In this area, designated wilderness is 300 feet north side of the highway. A small portion of this parcel would be within the boundaries of wilderness.

   The other 220-acre parcel is just to the southwest of the above parcel and occurs on the rugged slopes of the Argus Range within designated wilderness. Current threats are unknown.

9. Jackass Flat (Saline Range). This parcel is approximately 155 acres and lies just east of the southern end of Jackass Flat in the Saline Range. The parcel is not within designated wilderness. There is at least one structure on the property. Current threats are unknown.

10. SW Funeral Mountains. This parcel is approximately 228 acres and lies in the southern end of the Funeral Mountains, just southeast of the Red Amphitheater in designated wilderness. It appears to be on a rugged mountain slope with no existing access. Current threats are unknown.

11. Goler Canyon (Myers Ranch). This 40-acre parcel lies in the very southern end of the Panamint Range, at the head of Goler Canyon, in a very isolated portion of the Park. The property contains several buildings and springs labeled as Myers Ranch on the USGS quadrangle, near Sourdough Spring. The parcel is within designated wilderness. Current threats are unknown.

12. Other Patented Mining Claim Groups. The Ibex Hills section of Death Valley is perhaps the most desolate region within the Park. Dominated by the dry sink of the Amargosa River, the landscape consists mostly of sand, salt, and the low Ibex Hills. The region has always been isolated from any centers of population, however small, and the present road network completely bypasses it.

    Current aesthetic appeal of the area includes marsh and spring habitat and associated wildlife, sand dunes, salt flats, rugged mountains with relatively undisturbed canyons to explore, valley vistas, and solitude.

    Visitation to the area is low and is generally focused in two areas: the Ibex Dunes and Saratoga Springs. The isolation and quiet solitude of the area provides a major attraction. Some are attracted by the unique physical and biological aspects of the spring and surrounding hills, including the pupfish and large variety of bird life that abounds in the area.

    The Ibex Hills have received some impact on their pristine character by the presence of the Superior Mine and other smaller talc operations. On the whole the past activity presents a visual intrusion only to the visitor who ventures into the hill' s interior.

    Currently no mining activity takes place within several miles of the Ibex Hills and small amounts of traffic travel the road from Ashford Mill to the spring. As a result, this portion of the Park is nearly free of noise from human activity, with the exception of military overflights. However, a proposal for an underground talc mine on unpatented claims in wilderness is currently under review by the Park.

    One 34-acre parcel and one 5-acre parcel are the only patented claims in the Ibex Hills.

    The Saddle Rock Group is located in the Skidoo Mining District on the east slopes of Emigrant Canyon. The five lode claims, at an elevation of about 4,800 to 5,400 feet, were recorded on August 11, 1913. Development consisted of three tunnels and five shallow shafts. There is no record of production for the site, and it would appear that all the shafts, adits, and minor cuts in the vicinity were purely exploratory.

    Gold Hill is one of the earliest mining areas within the old monument, its discovery being the natural result of exploration by miners out of the South Park District around Panamint City who were moving into the Butte Valley and Panamint Range area. Gold Hill' s ore was evidently first processed at Arrastre Spring, and then later at the mill at Warm Spring. The Panamint Treasure Mine is also located near Gold Hill, a high summit north of Warm Spring Canyon and west of Galena Canyon. Gold Hill is located in the Panamint Mining District, which turned out mostly gold, lead, and silver. A mining camp was started here in 1889 and the area seemed rich enough in gold ores to warrant construction of reduction works of some sort. The mine

workings consist of adits and the ruins of some sort of stone structure. There are three 20-acre patented claims just south of Gold Hill.

The Gold King Mine is located one mile east of Journigan's Mill in Emigrant Canyon. The Extension lode joins the east end of the Gold King. During the historical survey in April 1978 a few shafts, dugouts or storage pits, and level building sites were found. The wash is gradually filling the area with gravel and silt. Evidently dating from the 1930s, the area does not have much historical interest.

In upper Greenwater Valley near the old Greenwater townsite is a large 410-acre block of patented mining claims that was brought into the Park with the 1994 expansion. This site appears to have numerous mining prospects associated with the short-lived copper mining in this area. Although there is no current mining on the property, current threats are unknown.

At the mouth of Copper Canyon in the Black Mountains is a 41-acre patented claim. Current threats are unknown.

In a small drainage on the southern side of Wildrose Canyon is a 42-acre patented parcel commonly referred to as the Monopoly group. This claim has been inactive for many years and current threats are unknown.

Surprise Canyon (Panamint City). In the upper reaches of Surprise Canyon, in the vicinity of Panamint townsite, and in adjoining Woodpecker Canyon, are numerous patented mining claims totaling about 262 acres. This area was added to the Park in 1994 and includes extensive mine workings, structures, prospects, roads, and other features associated with the mining heyday. Current threats are unknown.

Pleasant Canyon (Panamint Mountains). In the upper reaches of Pleasant Canyon there is a 70-acre patented parcel that appears to be in the Park. However, the Park boundary also excludes a road corridor leading to the Porter Mine and a land parcel that appears to include the mine. It is difficult to determine with current information if they are the same properties. The 70-acre parcel appears to coincide with the Cooper Mine, about a half mile south of the Porter Mine. This area is within the Park and is excluded from wilderness.

Crystal Hills (southwest Owlshead Mountains). In the extreme southwestern corner of the Park is a portion of the boundary that protrudes into the China Lake Naval Weapons Center. In this area is a 728-acre patented mining claim parcel that overlies the majority of the Crystal Hills. There is no current activity and current threats are unknown.

### 3. Mineral Rights (6,765 acres est.)

There are approximately 125 unpatented mining claims within the Park totaling an estimated 2,262 acres and 7 parcels of land with reserved mineral rights totaling approximately 2,262 acres. Many of these claims have had historic mining activity. The number of unpatented mining claims fluctuates constantly as owners stop filing required annual notices or stop paying on annual maintenance fees which are due by August 31st each year to retain an ownership interest in their claims. See "Appendix B: Unpatented Mining Claim Groups" in this "Land Protection Plan" for a listing as of 2000.

### 4. Water Rights

Initial research on outstanding water rights in the Park at the State Water Resources Control Board in Sacramento revealed that there are numerous appropriated water rights claims on Park water sources

(springs, seeps, streams, wells). Many of these were obtained by ranchers who lease grazing allotments. There are also an unknown number of water rights that were established prior to the state recordation requirement. It will be necessary for the Park to research county records to identify these rights.

### 5. Rights-of-way and Easements

There are probably numerous easements and rights-of-way that exist in the Park, many of which pose little or no threat to the protection of resources. Additional research over the next several years would have to be conducted in order to adequately document all the outstanding rights. Agreements would be sought where necessary to protect the Park resources. Only in limited instances would acquisition of the interest be appropriate or warranted.

The counties of Inyo and San Bernardino contend that certain roads in the Park are valid under RS-2477. The validity of this claim has not been determined. Any valid right-of-way would be included in future amendments to this land protection plan as appropriate protection strategies are identified.

### 6. Grazing Permits

The California Desert Protection Act provides for grazing to continue under NPS management at no more than the levels existing on October 31, 1994. Portions of four grazing allotments that were issued by the Bureau of Land Management prior to the act occur in the new additions to the Park: Eureka Valley, Lacey-Cactus-McCloud, Hunter Mountain, and Last Chance. The allotments are partially in Death Valley and partially on BLM land. Total animal unit months (AUMs) on NPS land at the establishment of the Park were 2,734. The portions of the Eureka Valley and Lacey-Cactus-McCloud allotments inside Death Valley have no authorized AUMs and no grazing is permitted on them. Last Chance allotment has not been issued a permit since 1996 due to the lack of forage. The Hunter Mountain allotment occurs on both NPS and BLM lands. The NPS portion covers about 86,400 acres and contains 1,105 AUMs.

| Grazing Allotment | Total Acres | % on NPS | Acres on NPS | Total AUMs | NPS AUMs |
|---|---|---|---|---|---|
| Hunter Mountain | 127,200 | 68% | 86,400 | 1,105 | 1,105 |
| Last Chance | 90,800 | 61% | 55,605 | 3,267 | 1,628 |
| Eureka Valley | 16,700 | 3% | 468 | 45 | 0 |
| Lacey-Cactus-McCloud | 420,000 | <1% | 760 | 4,873 | 0 |
| **TOTALS** | **654,700** | **22%** | **143,233** | **9,290** | **2,733** |

Eureka Valley is an ephemeral allotment only. Hunter Mountain has a defined season of use from November 20 to June 30.

## B. COMPATIBLE AND INCOMPATIBLE USES

The preservation of unimpaired natural systems, resources and cultural resources is the essential management objective of Park units. Commercial uses generally are incompatible with the accomplishment of that objective. Mining may potentially affect pristine desert scenery and disrupt the natural system through additional vehicular access and noise, lights, odors, and possible reduction of water quantity, quality, and air quality.

### Disclaimer

The land protection planning process requires that the National Park Service determine activities on nonfederal land that would be incompatible with Park management objectives, IF such uses were

proposed or carried out. The listing of incompatible activities in this *Land Protection Plan* does not constitute a prohibition of such uses. The National Park Service has limited existing regulatory authority to preclude such incompatible activities. Rather, the listing of incompatible activities is intended to provide a reasonable basis for determining where, and under what circumstances, the National Park Service would seek funding to acquire nonfederal lands.

### Compatible Uses

In the short term, the National Park Service recognizes that some uses on private or state lands would not preclude ultimate accomplishment of Park management objectives. However, over the long-term, the continued use of private land for the following purposes would likely preclude accomplishment of scenic and ecological objectives of the Park units and should be gradually eliminated. However, given the scale of these uses in relation to Park size, many impacts may be limited and temporary, and the lands and natural systems susceptible to restoration when the uses are terminated.

The following uses are considered to be compatible on a short-term basis:

1. Routine maintenance and repair of private dwellings and existing associated structures.

2. Minor modifications to existing structures.

3. Replacement of roofing and siding with materials that are compatible with scenic values.

4. Reconstruction in kind of damaged or destroyed structures.

5. Replacement of a structure that is purposefully removed by a structure of equal size and design that serves the same purpose and occupies essentially the same site as the removed structure.

6. Camping or temporary parking of motorhomes on private lands.

7. Erection of no trespassing signs, fences, and gates to prevent trespass.

8. Use of, or construction or installation of utilities, including roads, on federal lands to gain access to nonfederal property that provides the owner with reasonable use and enjoyment of their land, in accordance with Section 708 of the California Desert Protection Act, with minimum disruption to federal lands (access across NPS lands requires a permit).

9. Mineral development in connection with valid existing rights if such mining is under an NPS-approved plan of operations that meets the standards of approval of 36 CFR Part 9.

10. Grazing activities permitted by law that do not significantly impact Park resources.

Approval of the National Park Service is required for numbers 9 and 10 permissible short-term uses of private lands.

### Incompatible uses

The following uses of private property are incompatible with the management objectives of Death Valley National Park in both the short and long-term:

1. Activities that impair the integrity of a site, building or object that is listed on the National Register of Historic Places.

2. Activities that do not comply with all requirements and standards specified under applicable NPS regulations.

3. Duplicative commercial activities, other than National Park Service regulated mining, such as businesses, stores, food and lodging establishments.

4. Establishment of sites for the disposal of solid waste, whether hazardous or non-hazardous.

5. Activities such as removal of natural vegetation, earth moving or the like that significantly impact natural or cultural resources, wilderness values, or the visual quality of the Park.

6. Activities that create a hazard or that endanger the safety of Park staff or visitors.

7. Splits in ownership or sell-off of portions of the land wherein development or initiation of new uses affecting Park resources is contemplated.

## C. ACQUISITION HISTORY

When Death Valley National Monument was established on February 11, 1933, thousands of acres of land were in nonfederal ownership. Acquisition of these lands through purchase, exchange, etc. was initiated. With passage of the California Desert Protection Act in October 1994, thousands of additional acres of nonfederal lands and interests were added to the Park. The number of acres acquired since 1933 is as follows:

| Acquisition Method | Acquired Acres |
|---|---|
| Purchase | 10,922.13 |
| Complaint in Condemnation | 971.60 |
| Declaration of Taking | 0.00 |
| Donation | 2,010.00 |
| Exchange | 33,325.31 |
| **Total Acquisition** | **47,229.04** |
| Total Federal Acres | 3,344,313.00 |
| Nonfederal Acres Remaining | 51,859.00 |
| **Total Acres in Park** | **3,396,172.00** |

Land acquisition expenditures at Death Valley National Park so far have totaled $3,025,396.

## D. ACQUISITION CEILING

Sec. 901 of the California Desert Protection Act imposes a ceiling of $300,000,000 for all land acquisition costs associated with the three National Park Service administered areas (including Death Valley, Mojave and Joshua Tree) and the Bureau of Land Management administered wilderness areas created by the California Desert Protection Act.

# IV. AVAILABLE LAND PROTECTION AND ACQUISITION OPPORTUNITIES

## A. LAND PROTECTION OPTIONS

### Protection Alternatives

A number of land protection alternatives have been considered in arriving at the recommended methods. Factors influencing the methods considered and selection of the recommended plan include cost-effectiveness, long term goals, degree of compatibility of private ownership, the type of jurisdiction, and consideration for long established owners. The preferred alternative for land protection must assure preservation and restoration of the natural environment, protection of historic and prehistoric values, and enhance public enjoyment of the parks.

Potential protection alternatives are discussed below.

#### 1. Agreements

Agreements are legal instruments defining administrative arrangements between two or more parties. The instrument can provide for the exchange of services or benefits between the parties. Terms of agreements relevant to land protection might include:

a. Compatible and incompatible land uses.

b. Management of natural and cultural resources.

c. Responsibility for maintenance.

d. Law enforcement responsibilities.

Agreements are most useful as interim land protection methods where there is a coincidence of interests between the parties. Because they can be terminated by either party, agreements are generally not acceptable as long term protection methods, particularly in the case of lands intended for preservation in their natural state. They can be very useful as short term protection instruments. They may have some application for both private and public lands.

#### 2. Regulations

**Local Land Use Regulations Use**

Private lands in the Park fall under the jurisdiction of Inyo, Mono and San Bernardino counties in California, and Nye and Esmeralda counties in Nevada. The counties adopt and enforce land use regulations that control the type and density of land use and development on private property, and ensure adherence to basic public health and safety standards. Regulation is intended to provide generally for the control of economic uses of land and to mitigate to the extent possible the adverse effects of such uses. It is not an appropriate or useful long-term protection method for lands intended for preservation or restoration of natural conditions. However, land use regulation does have potential as an interim protection method for developed areas planned for restoration but where land acquisition is expected to require many years.

**National Park Service Regulations (36 CFR Parts 1–5 and 7)**

Death Valley National Park is an area of proprietary Federal jurisdiction. The level of jurisdiction that the United States holds on its lands is immaterial to the ability of the United States to manage and protect Federal lands. However, in areas of proprietary jurisdiction, the National Park Service decided in rulemaking that regulations in 36 CFR Parts 1 through 5 and 7 would apply only to Federal lands. An exception, adopted on July 5, 1996, permits the application of NPS rules in 36 CFR Parts 1–5 and 7 to nonfederal lands in a proprietary jurisdiction Park, IF such nonfederal lands are subject to a written agreement with the owner.

In addition, if the state of California ceded some, or all, of its jurisdiction over nonfederal lands in the Park to the United States, then ten of the NPS regulations at Parts 1–5 and 7 would apply to conduct on private lands. Even then, the applicable regulations deal with wildlife protection, fires, disorderly conduct, weapons and similar conduct. The National Park Service possesses no general regulations on "land use" or development that would apply to the nonfederal lands even if the Park were an area of concurrent or exclusive jurisdiction.

Death Valley also has special regulations at 36 CFR Part 7.26 (a) that prevent use and occupancy of mining claims in the old Monument located after June 13, 1933, for any purpose other than mineral exploration and development. Miners are also required to file copies of claim location notices with the Superintendent. These regulations also restrict the use of water without a permit issued by the NPS. Finally, these regulations designate two airstrips in the Park: 1) Death Valley airport at Furnace Creek, and 2) Stovepipe Wells airport.

**National Park Service Regulations (36 CFR Parts 6 and 9)**

National Park Service regulations at 36 CFR Part 6 (Solid Waste Sites) and at 36 CFR Part 9A (Mining Claims) apply to all lands in every Park without regard to the level of jurisdiction that the United States holds over an area. Parts 6 and 9 apply to the nonfederal land within Death Valley National Park. The application of 36 CFR Parts 6 and 9 would prohibit or otherwise restrict certain proposed land uses on nonfederal (and Federal) lands within the Park. Parts 6 and 9 of 36 CFR provide a certain level of resource protection, short of acquisition. Section 519 of the California Desert Protection Act (16 U.S.C. 410aaa-59) states that, until acquired by the United States, nonfederal lands within the boundaries of national park system units designated or enlarged by the act are not "subject to any of the rules or regulations applicable solely to the Federal lands within such boundaries." The rules at 36 CFR parts 6 and 9 apply to all lands within areas of the National Park System boundaries and are not applicable solely to federal lands within such areas. Thus, the application of Parts 6 and 9 to nonfederal lands within the boundaries of Death Valley National Park does not conflict with Section 519 of the California Desert Protection Act.

Regulations at Part 9, in particular, generally provide for the control of mining uses and to mitigate, as far as possible, the adverse effects of such activity on parks. Since the primary objective of the Park is to preserve and restore natural systems, the conduct of mining, no matter how closely controlled or regulated, may be inconsistent with management objectives in some places. Regulation of mining has great value as an interim protection method in the event that more effective methods are not implemented in the future.

Regulations at Part 6 prohibit the establishment of new sites for the disposal of solid waste on any lands with the Park, except for sites that generate waste solely from National Park Service activities.

**U.S. Fish & Wildlife Service Regulations**

U.S. Fish and Wildlife Service regulations at 50 CFR Part 17 implement the provisions of the Endangered Species Act (16 U.S.C. 1531, et seq.). These regulations prohibit persons from causing "harm" to federally-listed species. "Harm" is defined to include significant habitat modification or degradation that actually kills or injures wildlife. The Endangered Species Act prohibits persons from taking, including "harming" listed species. However, persons may obtain a permit from the Secretary of the Interior to "take" listed species, "If such taking is incidental to, and not the purpose of, carrying out an otherwise lawful activity." (16 U.S.C. 1539(a)(1)(B)).

Persons proposing to develop nonfederal lands within the Park that may result in harm to listed species or habitat listed as critical, need to obtain a permit from the U.S. Fish and Wildlife Service prior to undertaking such development. This permitting process, while not aimed at controlling the use of land, could affect the methods and extent to which a person may develop lands in the Park where listed species or their habitat exist.

### 3. Less-than-Fee Acquisition

Less-than-fee acquisition involves acquiring only a portion of the rights of ownership of a tract of land. For example, scenic easements may be acquired to protect landscapes by limiting the owner's use of his land, or rights-of-way may be acquired to permit construction of roads, trails, pipelines, etc. The primary value of less-than-fee applications in Park situations is where some degree of private economic activity, e.g. farming, ranching, etc., is consistent with Park objectives.

In some National Park Service administered areas, where preservation of a pastoral historic scene is a primary management objective, scenic easements represent a highly desirable form of protection method, permitting continuation of agricultural land uses which contribute to the purposes of the unit. However, in the case of Death Valley, these objectives are not identified in the legislation, and therefore, less-than-fee instruments have limited utility.

### 4. Fee Acquisition

Fee acquisition is appropriate where the Park objectives are preservation and restoration of the natural systems, and there are no compatible private land uses.

## B. ACQUISITION OPTIONS

### 1. Private Lands

The National Park Service can acquire interests in private land through several different methods.

a. Purchase with donated or appropriated funds.

b. Donation of lands or interests in land. Landowners with substantial taxable incomes are sometimes interested in this method as the Internal Revenue Code allows certain tax deductions for donation of land or interests in land for approved conservation purposes, including national parks. Landowners should consult their accountants and attorneys for specific tax advice on contemplated donations.

c. Bargain Sale. A bargain sale is a partial donation where the landowner agrees to sell for less than full value and the difference may be treated as a charitable contribution that may provide tax benefits.

d. Exchange. Land exchanges offer surplus federal lands elsewhere in California for property in the parks. The feasibility of this type of exchange is dependent on the availability of other federal lands and its prospective utility to the landowner.

e. Condemnation. The federal government has the authority to acquire private property through the federal court system when needed for public purposes or to prevent resource damage. This method is used where the owner and the National Park Service cannot reach agreement on price. It is also used in some cases to clear title or where landowners are unknown or cannot be located. Just compensation is determined through the judicial process.

f. Acquisition with Reservation of Use and Occupancy. Owners of developed properties can in some cases sell their property to the National Park Service and at the same time reserve the property's use for either a period of up to 25 years or for life. The purchase price is reduced to account for the reserved period of continued use.

## 2. Public Lands

Although Congressional guidelines on the acquisition of lands owned by state and local agencies generally favor donation, the policy toward state "school sections" permits acquisition by either exchange or purchase, with a preference for the use of exchange. State school lands in Death Valley National Park were specifically identified in the California Desert Protection Act as priority for exchange for excess federal property.

# V. SUMMARY OF ACQUISITION PROCEDURES

The Division of Land Resources assigned to the Pacific Great Basin Support Office in San Francisco is responsible for carrying out the land acquisition program. It will be guided by the land protection strategy for each park unit as adopted through this planning effort and approved by the regional director.

The National Park Service is required by Secretarial Order 3127 to conduct a site assessment for hazardous materials on all properties being considered for acquisition. This process begins with a certified inspector completing a Level I checklist. If no evidence of previous hazardous materials use exists on the property or in the county, state, or federal records, the property is cleared for acquisition. If contamination is discovered or suspected, samples may be collected and analyzed at a licensed laboratory. Cleanup costs are considered the responsibility of the landowner.

The Park Service will obtain, at its expense, a preliminary policy of title insurance for each property which will identify the owner or owners of record and all encumbrances, such as mortgages, liens, judgments, right-of-way or other easements, affecting the property' s title.

Each property will be appraised by an independent contract appraiser. The landowner and/or his/her representative will be offered an opportunity to accompany the appraiser on the inspection of the property in order to afford the owner an opportunity to point out significant features of the property.

To assure the quality of appraisals, a staff appraiser will review all reports for compliance with proper appraisal procedures and check such elements as the thoroughness of the research performed and whether or not the appraiser has afforded the landowner the opportunity to accompany the appraiser.

Appraisers will be required to furnish an objective estimate of the "Fair Market Value" of the lands being appraised. The Uniform Appraisal Standards for Federal Land Acquisitions defines "Fair Market Value" as "The amount in cash, or on terms reasonably equivalent to cash, for which in all probability the property would be sold by a knowledgeable owner willing but not obligated to sell to a knowledgeable purchaser who desired but is not obligated to buy."

As soon as possible after the appraisal of a property has been received, reviewed, and approved, the Park Service will submit to the owner, subject to the availability of funds, a written offer which will not be less than the Park Service' s approved appraisal of the fair market value of the property. The owner will be provided with a copy of the Park Service' s appraisal upon request. Assuming that a mutually acceptable purchase price is agreed upon, closing will normally be completed by a local title company acting as escrow and closing agent within 6 to 8 weeks of signature by the owner and the Park Service of an Offer to Sell.

It is the responsibility of the seller to convey clear title to the property being acquired. Under Public Law 91-646, the Park Service may reimburse sellers for expenses incurred such as:

1. Recording fees, transfer taxes, similar expenses incidental to conveying the real property.

2. Penalty cost for prepayment of any pre-existing recorded mortgage entered into in good faith encumbering the real property.

3. The pro rata portion of real property taxes the owner paid to cover the period after title was vested in the United States.

The Park Service may pay other similar expenses to the extent they are fair and reasonable, but the Service will not pay for costs necessary to clear defects in title to the property.

The Park Service will make every effort to seek negotiated settlement wherever possible; however, if this is not possible, eminent domain proceedings may be initiated.

Eminent domain proceedings are initiated by the filing of a complaint in condemnation in federal court. There are two general types of condemnation: complaint-only and complaint with a declaration of taking. The National Park Service generally uses the complaint-only type of condemnation to acquire land. In this type of action, title to the land does not pass to the government until the court or jury has determined the amount of just compensation and this amount has been paid to the owner. Eminent domain proceedings may be employed to resolve title problems or clear title, or when negotiations are unsuccessful and Fair Market Value is to be determined by the court.

In addition to the complaint in condemnation, declarations of taking are used where title to the land must be vested in the United States immediately in order to prevent resource damage or to clear title to land after a negotiated agreement has been reached with the owner.

A declaration of taking vests title to property in the United States immediately upon filing papers in the court and the deposit of an estimate of just compensation. A portion of this deposit may be withdrawn by the owner as approved by the court.

## ACQUISITION OF LESS-THAN-FEE INTERESTS (EASEMENTS)

The procedure for acquiring less-than-fee interest is the same as that described above for acquisition of fee interest except for the fact that the owner does not relinquish title and possession of the property.

# VI. RECOMMENDATIONS

This *Land Protection Plan* recommends that the National Park Service acquire most nonfederal lands within the Park in fee, except for State lands. State school sections are actively being exchanged for federal surplus property outside the Park in accordance with CDPA direction.

The National Park Service has considered alternative means of land protection and concluded that only in limited instances would they meet the long-term management objective of the Park, which is the preservation and restoration of lands in their natural condition, and the protection of cultural resources.

To the extent lands offered for sale may exceed the funds available to the National Park Service to acquire them, the National Park Service will give preference to acquisition according to the priority list that follows. There is no expectation that tracts can be acquired only in the order shown. These areas contain the greatest number of tracts, most of which are undeveloped and are in areas of high visitor use where development would be most apparent and disturbing to the scenic values.

**National Park Service priority for acquisition are as follows:**

It must be noted that none of these recommendations should be construed as proposing to prevent any acquisitions (by purchase, exchange or donation) now in progress nor are they offers to purchase land. Furthermore, the Park should retain the option of acquiring any parcel within the boundary regardless of priority should a proposed use or development be judged incompatible or detrimental.

The following factors were considered in determining long term priorities for each tract within the Park.

1. Properties in wilderness
2. Relative resource quality
3. Resource vulnerability
4. Visibility
5. Legislative restriction (patents prior to Act of June 13, 1933)
6. Regulatory controls (Mining in the Parks Act)
7. Validity of unpatented claims
8. Visitor safety and visitor use conflicts
9. Environmental threats
    a. dust
    b. noise

* If the holder of a grazing permit indicates a willingness to sell base property associated with a permit, the National Park Service would make the acquisition of such base property a priority compared with the acquisition of other lands (per CDPA section 306(b)).

Applying these factors to the nonfederal parcels, the following priorities were developed for geographic areas within the Park.

| Priority | Rationale |
|---|---|
| 1. Lower Furnace Creek | Outstanding scenic attraction (1,2)<br>Vulnerable (3)<br>Pre-monument patents (5)<br>Along primary entrance route (8)<br>Current recreation use (8) |
| 2. Upper Furnace Creek | Very scenic area, heavily used by visitors (1,2,8,9) |
| 3. Bullfrog Hills | Historic Areas (2,8) |
| Big Bell Group | Historic Areas (2,8) |
| Inyo Gold | Historic Areas (2,8) |
| 4. Warm Spring Canyon, Skidoo | Visible to visitors, historic areas (3,8) |
| 5. Remote small claim groups | wilderness (1)<br>Relative resource quality (2)<br>Susceptibility to disturbance (3,8) |
| 6. Amargosa | Wilderness (1), visibility (4) |
| 7. Saline Valley | Visibility (2), resource vulnerability (3) |
| 8. Jackass Flat | Visibility (4), relative resource quality (2), resource vulnerability (3) |
| 9. SW Funeral Mountains | Wilderness (1) |
| 10. Goler Canyon (Meyer Ranch) | Wilderness (1), relative resource quality (2) |
| 11. Panamint Springs | Wilderness (1), visibility (4) |
| 12. Amfac Properties | Visibility (4), relative resource quality (2), resource vulnerability (3) |

Adjustments can be made in these priorities at the time of updating of the *Land Protection Plan* and by the Superintendent at any time the changing situation dictates.

**FIGURE B- 1. LANDOWNERSHIP**

color 11x 17

back of figure B-1. Landownership
11x17 color

**FIGURE B- 2. MINING CLAIMS**

**FIGURE B- 3. KNOWN WATER RIGHTS**

**FIGURE B- 4. GRAZING ALLOTMENTS**

# APPENDIXES

A. Legal Description for Park Boundary
B. Unpatented Mining Claim Groups
C. Patented Mining Claim Groups
D. Appropriated Water Rights

# B-1. LEGAL DESCRIPTION FOR PARK BOUNDARY

FINAL July 18, 1996

**LEGAL DESCRIPTION**
**OF THE**
**BOUNDARIES OF DEATH VALLEY NATIONAL PARK**

*(This is a scanned reproduction of the original and may contain undetected errors; minor typograhical errors have been corrected in this version that do not appear in the official version submitted to Congress.)*

**NOTE:** All following map references are to features depicted on 1:24,000 scale United States Department of Interior Geological Survey 7.5 Minute Series Topographic Maps, Provisional Editions 1982–1988, except Bonnie Claire SE, Nev. 1967 and Bonnie Claire SW, Nev. 1968.

**PARCEL NO. 1 DEATH VALLEY NATIONAL PARK**

BEGINNING at a point on the State boundary, line between California and Nevada near the closing corner between Sections 4 & 9, T.27N., R.4E., SBM, where it intersects 50 feet southwesterly of the centerline of the dismantled, historic Tonopah & Tidewater Railroad grade;

thence northwesterly along said State boundary line to its intersection with the range line between T.13S., R.45E. & R.46E., MDM;

thence northerly along said range line to the township line between T.12S. & T.13S., R.45E. & R.46E., MDM;

thence easterly along said township line to the range line between T.12S., R.45E. & R.46E., MDM;

thence northerly along said range line to its intersection with the township line between T.10S. & T.11S., R.45E. & R.46E., MDM;

thence westerly along said township line to its intersection with the aforesaid State boundary line;

thence northwesterly along said State boundary line to a Point 50 feet southerly of the centerline of an unnamed road located in the northwest ¼ of protracted Section 14, T.7S., R.39E., MDM;

thence westerly changing to northwesterly, parallel with and 50 feet southerly and southwesterly of said centerline to a point 50

feet southeasterly of the centerline the Willow Creek/Cucomungo Canyon Road, Inyo County Road S2047;

thence southwesterly, changing to westerly, parallel with and 50 feet southerly of said centerline to a point 50 feet easterly of the centerline of the North Eureka Valley/Fish Lake Valley Road, Inyo County Road 2048;

thence southwesterly, parallel with and 50 feet southeasterly of said centerline to a point 50 feet from said centerline nearest elevation point 4497T;

thence southwesterly, crossing over said road, to the corner common to Sections 29, 30, 31 & 32, T.7S., R.38E., MDM, also being elevation point 3696T;

thence bearing southwesterly approximately 1.8 miles to a point 50 feet easterly of the intersection of the centerlines of two unnamed roads also being near elevation point 3500T;

thence southerly, parallel with and 50 feet easterly of the centerline of one said unnamed road to a point 200 feet northerly of the centerline of the Big Pine/Death Valley Road, Inyo County Road S2017;

thence southeasterly changing to northeasterly, parallel with and 200 feet northerly of said centerline of the Big Pine/Death Valley Road, Inyo County Road S2017, to a point along that road in Hanging Rock Canyon, between the 4640 and 4680 contour interval, where a northeasterly trending unnamed drainage approximately mid-way between elevation points 5238T and 5100T intersects the road;

thence northeasterly along the center of said drainage to the 6320 contour interval;

thence northeasterly approximately 0.1 miles to the ridge line between elevation points 6573T and 6715T;

thence easterly to elevation point 6367T;

thence southeasterly to elevation point 5702T;

thence easterly to elevation point 5151T;

thence bearing northeasterly to a point 200 feet southerly of the intersection of the centerline of the Last Chance Canyon Road and the centerline of the Big Pine/Death Valley Road, Inyo County Road S2017, also known as Crankshaft Junction, near elevation point 3911T;

thence southwesterly, changing to westerly, changing to northwesterly, changing to westerly, parallel with and 200 feet southerly of the centerline of the Big Pine/Death Valley Road, Inyo County Road S2017, to a point 50 feet easterly of the centerline of an unnamed road where it turns south, near the section line between Sections 1 & 2, T.8S., R.37E., MDM;

thence southerly, changing to southwesterly, parallel with and 50 feet easterly of said centerline to a point 50 feet easterly of the centerline of the Harlis & Broady Mine Road, near the section line between protracted sections 11 & 14, T.8S., R.37E., MDM;

thence southeasterly, changing to southwesterly, changing to westerly, parallel with and 50 feet northeasterly and southeasterly and southerly of said centerline of the Harlis & Broady Mine Road to a point on the center of a southwesterly trending unnamed drainage near the 4960 foot contour interval, also near the center ¼ corner of protracted Section 28, T.8S., R.37E., MDM;

thence southwesterly along the center of said drainage to the 5520 foot contour interval;

thence continuing along the western fork of said drainage to where it intersects the 5920 foot contour interval;

thence on a northwesterly bearing to the elevation point 6743T;

thence bearing west approximately 0.3 miles to the center of a second unnamed drainage encountered along said bearing being near the section line between protracted Sections 29 & 30, T.8S., R.37E., MDM, also near the 6520 foot contour interval;

thence northerly, changing to northeasterly along the center of said drainage to a point 50 feet westerly of the centerline of an access road to an unnamed mineral prospect, also being near the SW $^{1}/_{16}$ corner of protracted Section 20, T.8S. R.37E., MDM;

thence northerly changing to westerly, parallel with and 50 feet westerly and southerly of said centerline of said unnamed road to a point 200 feet southeasterly of the centerline of the Big Pine/Death Valley Road, Inyo County Road S2017, also being near elevation point 5515T;

thence southwesterly, changing to westerly, changing to southerly, parallel with and 200 feet southeasterly and southerly and easterly to the centerline of said road, to a point 200 feet southeasterly of said centerline of the road at its intersection with the section line between protracted Sections 1 & 2 T.9S.,

R.36E., MDM, being just north of the corner common to protracted Sections 1, 2, 11 & 12, T.9S., R.36E., MDM;

thence southerly along the section line between protracted Sections 1 & 2, 11, 12 to the corner common to protracted Sections 11, 12, 13, 14, T.9S., R.36E., MDM;

thence southerly along the line between protracted Sections 13 & 14, 23 & 24, 25 & 26 and 35 & 36 to the corner common to protracted Sections 1, 2, 35,36, being also the township line between T.9S. & T.10S., R.36E.,MDM;

thence easterly along said township line to the township corner common to T.9S. & T.10S., R.36E. & R.37E., MDM, also being the section corner of protracted Sections 1, 6 & 36;

thence southerly along the range line between T.10S., R.36E. & R.37E. and T.11S., R.36E. & R.37E., MDM to the section corner common to protracted Sections 30 & 31, T.11S., R.37E., MDM;

thence easterly along the section line between protracted Sections 30 & 31 and 29 & 32 to a drainage near the corner common to protracted Sections 28, 29, 32 & 33, T.11S., R.37E., MDM;

thence easterly along the center of said drainage to a point 5~~S~~o feet southwesterly of its~~,~~ intersection with the centerline of the Saline Valley Road, Inyo County Road 3013;

thence southerly, parallel with and 50 feet westerly of the centerline of the Saline Valley Road, Inyo County Roads 3013 & 4013 (changing to 4013 at Willow Creek) through protracted Sections 3, 10, 11, 14, 23, 26 & 35 to a point on the township line between T.12S. & T.13S., R.37E., MDM;

thence continuing southerly, changing to southeasterly, parallel with and 50 feet westerly of said centerline through protracted Sections 1, 2, 11, 12, 13, 18, 19, 30, 31 & 32 to a point on the township line between T.13S. & T.14S., R.38E., MDM;

thence continuing southeasterly, parallel with and 50 feet westerly of said centerline for approximately 0.25 miles to an unnamed vehicle trail, located in the northwest 1/4 of Section 5 T.14S., R.38E., MDM, elevation point 1178T;

thence continuing on southerly, parallel with and 50 feet westerly of said centerline of road 4013 past the unnamed road, past elevation points 1178T, 1141T & 1152 and continuing southeasterly, changing to southerly, changing to easterly, changing to southerly, parallel with and 50 westerly of the centerline of the Saline Valley Road, Inyo County Road 4013,

through protracted Sections 5, 4, 9, 16, 21, 22 to the intersection of the north-south centerline of protracted Section 27, T.14S., R.38E., MDM, near the 1090 elevation point;

thence south along the north-south centerline of protracted Sections 27, 34 T.14S., R.38E. & protracted Section 3, T.15S., R.38E., MDM to the 1800 foot contour interval;

thence southerly, changing to southeasterly, changing to easterly along the 1800 foot contour interval to the intersection with the section line between sections 8 and 17, T.15S., R.38E.;

thence due south to the center of the drainage of San Lucas Canyon;

thence southerly following the San Lucas Canyon to a point 50 feet northeasterly of San Lucas Canyon Road near elevation point 4744T;

thence southeasterly, parallel with and 50 feet northeasterly of said centerline of said road, which continues along the course of San Lucas Canyon, to its intersection with the centerline of the Southern Conglomerate Mesa/Cerro Gordo Road near elevation point 6198T;

thence on a southeasterly bearing to elevation point 6662T;

thence on a southeasterly bearing to elevation point 6092T coincident with the southeastern ridge line of the Santa Rosa Hills;

thence southeasterly along the said ridge line of the Santa Rosa Hills to a point 200 feet westerly of the centerline the Saline Valley Road, Inyo County Road 5013A nearest to Bench Mark 5376.4;

thence northeasterly parallel with and 200 feet westerly of said centerline of the Saline Valley Road to a point 200 feet westerly of the junction of an unpaved, unnamed road near elevation point 5321T;

thence across said road due east approximately 0.95 miles to a point 50 feet easterly of the centerline of an unnamed road east of the Lee Mines;

thence southerly, parallel with and 50 feet easterly of said centerline of said road to a point 50 feet southeasterly of the centerline of a second unpaved road, located southeasterly of the Lee Mines, near elevation point 5232T;

thence southeasterly, parallel with and 50 feet northeasterly of

said centerline of said unpaved road to a point 50 feet easterly of the centerline of its terminus;

thence continuing along the same bearing approximately 200 feet south of said point to a point 50 feet southeasterly of two unnamed mineral prospects;

thence due west approximately 1.05 miles to a point 200 feet east of the centerline of the Saline Valley/Hunter Mountain Road, Inyo County Road 5013A, south of the intersection of an unpaved road;

thence southerly, changing to easterly, changing to southeasterly, parallel with and 200 feet easterly and southerly and northeasterly of the centerline of the Saline Valley/Hunter Mountain Road, Inyo County Road 5013A to a point 300 feet northwesterly of the centerline of California State Highway 190;

thence northeasterly, parallel with and 300 feet northwesterly of the centerline of California State Highway 190 to a point 300 feet northwesterly of said centerline nearest to Bench Mark 4858.9;

thence on a southeasterly bearing to elevation point 5252T;

thence on a southeasterly bearing to elevation point 5602T;

thence continuing southeasterly on aforesaid bearing to a point on the range line between R.40E. & R.41E., T.18S., MDM;

thence southerly, approximately 0.2 miles on said range line to the center of an unnamed drainage;

thence southeasterly along the center of said drainage to a point on the section line between Sections 28 & 29, T.18S., R.41E., MDM;

thence southerly along said section line to a point in the center of an unnamed drainage immediately south of elevation point 3852T;

thence southeasterly, down the center of said drainage to the intersection with the center of the Darwin Canyon drainage;

thence southerly, up the center of the Darwin Canyon drainage to the point of intersection with the section line between Sections 3 & 4, T.19S., R.41E., MDM;

thence an a easterly bearing approximately 2.5 miles to elevation point 4008T;

thence northeasterly, down along the ridge line to the point of intersection with the east-west centerline of Section 31, T.19S., R.41E., MDM;

thence easterly on the E-W centerline of sections 31, 32, 33, and 34 to a point 200 feet northeasterly of the centerline of Inyo County Road S5018, the Panamint Valley Road;

thence southeasterly, parallel with and 200 feet northeasterly of the centerline of Inyo County Road S5018, approximately 4.75 miles to a point 200 feet from the centerline nearest to elevation point 1622;

thence southeasterly approximately 1.3 miles to the intersection of the centerlines of two unnamed and unpaved roads nearest to elevation point 1664;

thence southeasterly, along the centerline of said unnamed and unpaved road to a point of intersection with the section line between Sections 27 & 28, T.19S., R.43E. MDM;

thence southerly along said section line to the section corner common to Sections 27, 28, 33 & 34, T.19S., R.43E. MDM;

thence southeasterly to the section corner common to Sections 11, 12, 13 & 14, T.20S., R.43E. MDM;

thence southeasterly to the corner of Sections 27, 28, and surveyed Sections 33 & 34 T.20S., R.44E. MDM, said point also being on the northerly boundary line of the "Indian Ranch Reservation";

thence easterly to the 1/4 corner between Sections 27 & 34;

thence southerly along the north-south centerline of Section 34 and also being the easterly boundary of said "Indian Ranch Reservation" to the intersection with the center of the Hall Canyon drainage;

thence northeasterly along the center of the Hall Canyon drainage for approximately 2 miles to a point of intersection with centerline of the Hall Canyon Road, near the 4800 foot contour interval;

thence on a southeasterly bearing to elevation point 61BOT;

thence southeasterly to elevation point 7770T near the 1/4 corner and just south of the section line between Sections 16 & 21, T.21S., R.45E. MDM;

thence due east approximately 0.1 mile to the center of an unnamed drainage that is a tributary of Happy Canyon;

thence southerly along the center of said unnamed drainage to its intersection with the center of the Happy Canyon drainage;

thence bearing southwesterly to elevation point 7010T;

thence bearing southeasterly to a point 50 feet westerly of the intersection of the centerlines of Pleasant Canyon Road and Porter Mine Road;

thence northeasterly, changing to northerly, changing to southeasterly, parallel with and 50 feet northwesterly and westerly and northeasterly of the centerline of the Porter Mine Road to a point coincident with the north side line of the Hy-Grade #2 patented mining claim, Mineral Survey No. 7006;

thence easterly along line 1-4 of the Hy-Grade #2 to Corner No. 1 thereof, also being Corner No. 4 of the Hy-Grade #1, also of Mineral Survey No. 7006;

thence northeasterly along the northwest line 1-4 of the Hy-Grade #1 patented mining claim to Corner No. 1 thereof;

thence southeasterly along line 1-2 of the Hy-Grade #1 to Corner No. 2 thereof;

thence southwesterly along the southeast side line of the Hy-Grade #1 to Corner No. 3 thereof, also being Corner No. 2 of the Hy-Grade #2 patented mining claim;

thence westerly along the south side line of the of the Hy-Grade #2 patented mining claim to Corner No. 3 thereof;

thence southeasterly along the northeast end line of the Hy-Grade #3 patented mining claim, also of Mineral Survey No. 7006 to Corner No. 2 thereof;

thence southwesterly along the southeast side line of the Hy-Grade #3 patented mining claim to Corner No. 3 thereof;

thence northwesterly along the southwest end line of the Hy-Grade #3 patented mining claim to Corner No. 4 thereof, also being Corner No. 3 of the Hy-Grade #4 patented mining claim, also of Mineral Survey No. 7006;

thence northwesterly along the southwest end line of the Hy-Grade #4 patented mining claim to Corner No. 4 thereof;

thence northeasterly along the northwest side line of the Hy-Grade #4 patented mining claim to Corner No. 1 thereof, also being Corner No. 4 of the Hy-Grade #2 patented mining claim;

thence easterly along the north side line of the Hy-Grade #2 patented mining claim to a point 50 feet westerly of the centerline of the Porter Mine Road;

thence northwesterly, changing to southerly, changing to southwesterly parallel with and 50 feet southwesterly and easterly and southeasterly of the centerline of the Porter Mine Road to a point 50 feet northeasterly of the intersection of the Porter Mine Road and the Pleasant Canyon Road;

thence bearing southwesterly approximately 0.25 miles to elevation point 6538T;

thence southeasterly up and along an unnamed ridge line to the top of the ridge inside of the 7320 foot contour interval, near the center 1/4 corner of protracted Section 14, T.22S., R.45E.,MDM;

thence bearing southwesterly approximately 3 miles to elevation point 7267T, PARK USGS;

thence southwesterly approximately 0.65 miles to the head of Colter Spring, located in the northeast 1/4 of protracted Section 29, T.22S., R.45E., MDM;

thence southeasterly to elevation point 1717T (meters);

thence southerly to a point 50 feet westerly of the intersection of the centerline of the Redlands Canyon Road and the centerline of the Wood Canyon Road near elevation point 1289T (meters);

thence southeasterly, parallel with and 50 feet southwesterly of the centerline of the Wood Canyon Road to its terminus;

thence continuing along the center of the Wood Canyon drainage to the ridge line, approximately 0.25 miles southwest of elevation point 2165-T;

thence southwesterly, changing to southerly along said ridge line to Manly Peak, also being elevation point 2193.3 (meters);

thence bearing southerly to elevation point 2108.0 (meters);

thence bearing southeasterly to elevation point 1361T (meters);

thence bearing southerly to elevation point 1421T (meters);

thence bearing southeasterly to elevation point 1207T (meters);

thence bearing southeasterly to a point 50 feet southeasterly of the centerline of the Goler Canyon Road at the head of Sourdough Spring;

thence southwesterly, changing to westerly, parallel with and 50 feet southeasterly and southerly, of the centerline of aforesaid road, approximately 0.2 miles to the intersection of a drainage coming from the southeast near the 920 contour interval (meters);

thence bearing southwesterly from aforesaid intersection to elevation point 1046T (meters);

thence bearing southwesterly to a corner common to Sections 33 & 34, T.24S., R.45E., MDM, also being on township line between T.24S. & T.25S., said point also being on the Inyo County and San Bernardino County line, and also being on the China Lake Naval Weapons Center boundary;

thence easterly along said township line, also being on the Inyo County and San Bernardino County line, and also being the Northern Boundary of the China Lake Naval Weapons Center boundary, to the corner common to Section 4 & 5, T.25S., R.47E., MDM;

thence southerly along the section line between Sections 4 & 5, 8 & 9, 16 & 17, 20 & 21, and 28 & 29, T.25S., R.47E., MDM also being the boundary of the China Lake Naval Weapons Center, to the 1/4 corner between Sections 28 & 29, T.25S., R.47E., MDM;

thence westerly, continuing along said China Lake Naval Weapons Center boundary and the east-west centerline of protracted Sections 29 & 30, to the west 1/4 corner of protracted Section 30, said point also being on the range line between T.25S., R.46E. & R.47E., MDM;

thence southerly, continuing along said China Lake Naval Weapons Center boundary, and said range line to the corner common to protracted Sections 25 & 36, T.25S., R.46E., MDM;

thence westerly, continuing along said China Lake Naval Weapons Center boundary, and the section line between protracted Sections 25 & 36, to the east 1/16 corner between protracted Sections 25 & 36, T.25S., R.46E., MDM;

thence southerly, continuing along said China Lake Naval Weapons Center boundary and the north-south centerline of the northeast

1/4 of protracted Section 36 to the Center East 1/16 corner of protracted Section 36, T.25S., R.46E., MDM;

thence easterly, continuing along said China Lake Naval Weapons Center boundary and the east-west the centerline of protracted Section 36 to the east 1/4 corner of protracted Section 36, also being on the aforesaid range line between T.25S., R.46E. & R.47E., MDM;

thence northerly, continuing along said China Lake Naval Weapons Center boundary and said range line to the west 1/4 corner of protracted Section 31, T.25S., R.47E., MDM;

thence easterly, continuing along said China Lake Naval Weapons Center boundary and the east-west centerline of protracted Sections 31 & 32 to the center 1/4 corner of protracted Section 32, T.25S., R.47E., MDM;

thence southerly, continuing along said China Lake Naval Weapons Center boundary and the north-south centerline of protracted Section 32 to the south 1/4 corner of protracted Section 32 also being on the township line between T.25S. & T.26S., R.47E., MDM;

thence easterly, continuing along said China Lake Naval Weapons Center boundary and township line to a point on the San Bernardino Meridian;

thence southerly , continuing along said China Lake Naval Weapons Center boundary and San Bernardino Meridian to the west 1/4 corner of protracted Section 18 T.18N., R.lE., SBM;

thence easterly along the east-west centerline of protracted Section 18, 17, 16, 15, 14 & 13 to the east 1/4 corner of protracted Section 13, T.18N., R.lE., SBM, also being on the range line between R.lE. & R.2E., SBM;

thence northerly along said range line to the west 1/4 corner of protracted Section 18, T.18N., R.2E., SBM;

thence easterly along the east-west centerline of protracted Section 18, 17, 16, 15, 14 & 13 T.18N., R.2E., SBM, to the 1/4 corner between protracted Section 13, T.18N., R.2E., SBM, and protracted Section 18, T.18N., R.3E., SBM, also being on the range line between T.18N., R.2E. & R.3E., SBM;

thence continuing easterly along the east-west centerline of protracted Sections 18, 17, 16, 15, 14 & 13 to the 1/4 corner between protracted Section 13, T.18N., R.3E., SBM, and protracted Section 18 T.18N., R.4E., SBM, also being on the range line between T.18N., R.3E. & R.4E., SBM;

thence continuing easterly along the east-west centerline between protracted Sections 18, 17, 16, 15, 14 & 13, T.18N., R.4E., SBM, to the 1/4 corner between protracted Section 13, T.18N., R.4E., SBM, and protracted Section 18, T.18N., R.5E., SBM, also being on the range line between T.18N., R.4E. & R.5E., SBM;

thence continuing easterly along the east-west centerline between protracted Section 18, 17, 16, 15, 14, T.18N., R.5E., to a point 50 feet northeasterly of the centerline of the Harry Wade Road, Park Route # 1;

thence southeasterly, changing to easterly, changing to southeasterly, parallel with and 50 feet northerly and northeasterly of the centerline of the Harry Wade Road, Park Route # 1, to a point 300 feet westerly of the centerline of California State Highway 127;

thence northwesterly, parallel with and 300 feet southwesterly of the centerline of California State Highway 127 to a point 50 feet southerly of the centerline of an unnamed unpaved road near Bench Mark BM-JRH 15 410.2 (meters);

thence westerly, parallel with and 50 feet southerly of the centerline of an unnamed road to a point 50 feet southerly of the centerline of the Ibex Springs Road, near Bench Mark BM445.5 (meters);

thence bearing northwesterly to elevation point 662T (meters) on a ridge line;

thence continuing northwesterly along said ridge line to elevation point 687T (meters);

thence bearing northwesterly to the center 1/4 corner of protracted Section 32, T.20N., R.6E., SBM, also being coincident with the old Death Valley National Monument boundary;

thence northerly along the north-south centerline of protracted Sections 32 & 29, T.20N., R.6E., SBM, to the 1/4 corner between protracted Sections 20 & 29, also being coincident with the old Death Valley National Monument boundary;

thence westerly along the old Death Valley National Monument boundary, being the section line between protracted Sections 20 & 29, 19 & 30, T.20N., R.6E., SBM, and 24 & 25, T.20N., R.5E. to a point at the crest of the Ibex Hills, being near the 1210 contour interval (meters);

thence northeasterly changing to northerly along the crest of the

Ibex Hills to Ibex Peak, elevation point 1448T (meters);

thence northerly changing to northeasterly along a ridge line to elevation point 1296T (meters);

thence northeasterly along a ridge line to a point on the ridge line at the high point of a knob on the ridge line inside the closed 980 (meters) contour interval, approximately 0.2 miles southeasterly of Sheephead Spring;

thence bearing northwesterly, approximately 0.9 miles to elevation point 1166T (meters);

thence northeasterly, changing to northwesterly, changing to northerly along the crest of the Ibex Hills to elevation point 949T (meters);

thence due north to a point 300 feet north of the centerline of California State Highway 178;

thence northeasterly, parallel with and 300 feet northwesterly of said centerline to a point 300 feet southwesterly of the centerline of California State Highway 127;

thence northerly, parallel with and 300 feet northwesterly of said centerline to a point on the section line between protracted Sections 19 & 24, also being on the range line between T.24N., R.5E. & T.24N., R.6E., SBM;

thence southerly along said range line to the township corner common to protracted Sections 1, 6, 31 & 36, T.23N. & T.24N., R.5E. & R.6E., SBM;

thence westerly along the township line to the township corner, also being the on range line between R.4E. & R.5E., also the corner common to protracted Sections 1, 6, 31 & 36, T.23N. & T.24N., R.4E. & R.5E., SBM;

thence northerly along the range line to the corner common to protracted Sections 25, 30, 31 & 36, T.24N., R.4E. & R.5E., SBM;

thence westerly along the section line between protracted Sections 25 & 36, T.24N., R.4E., SBM to the corner common to protracted Sections 25, 26, 35 & 36, T.24N., R.4E., SBM;

thence northerly along the section line between protracted Sections 25 & 26, T.24N., R.4E., SBM to the corner common to 23, 24, 25 & 26, T.24N., R.4E., SBM;

thence westerly along the section line between protracted

Sections 23 & 26, T.24N., R.4E., SBM to the corner common to protracted Sections 22, 23, 26 & 27, T.24N., R.4E., SBM;

thence northerly along the section line between protracted Sections 22, 23, 14 & 15, T.24N., R.4E., SBM to the corner common to protracted Sections 10, 11, 14 & 15, T.24N., R.4E., SBM;

thence westerly along the section line between protracted Sections 10 & 15 to the west 1/16 corner between protracted Sections 10 & 15 T.24N., R.4E., SBM;

thence northerly along the north-south centerline of the southwest 1/4 of protracted Section 10 to the Center West 1/16 corner of protracted Section 10, T.24N., R.4E., SBM;

thence westerly along the east-west centerline of protracted Sections 9 & 10 to the Center East 1/16 corner of protracted Section 9, T.24N., R.4E., SBM;

thence northerly along the north-south centerline of the northeast 1/4 of protracted Section 9 to the northeast 1/16 corner of protracted Section 9, T.24N., R.4E., SBM;

thence westerly along the east-west centerline of the northeast 1/4 of protracted Section 9 to the Center North 1/16 corner of protracted Section 9, T.24N., R.4E., SBM;

thence northerly along the north-south centerline of protracted Section 9 to the 1/4 corner between protracted Sections 4 & 9, T.24N., R.4E., SBM;

thence westerly along the section line between protracted Sections 4 & 9, 5 & 8, 6 & 7 and 1 & 12 to the corner common to protracted Section 1, 2, 11 &.12, T.24N., R.3E., SBM;

thence northerly along the section line between protracted Sections 1 & 2 to the corner common to protracted Sections 1, 2, 35 & 36, also being on the township line between T.24N. & T.25N., R.3E., SBM;

thence westerly along the section line between protracted Sections 2 & 35 to the corner common to protracted Sections 2, 3, 34 & 35, T.24N. & T.25N., R.3E., SBM;

thence northerly along the section line between protracted Sections 34 & 35 to the corner common to protracted Sections 26, 27, 34 & 35, T.25N., R.3E., SBM;

thence westerly along the section line between protracted Sections 27 & 34 to the corner common to protracted Sections 27, 28, 33 & 34, T.25N., R.3E., SBM, also being coincident with the old Death Valley National Monument boundary;

thence northerly along the section line between protracted Sections 27, 28, 21 & 22, also being coincident with the old Death Valley National Monument boundary, to the corner common between protracted Sections 15, 16, 21 & 22, T.25N., R.3E., SBM;

thence westerly along the section line between protracted Sections 16, 21, 17 & 20, also being coincident with the old Death Valley National Monument boundary, to a point parallel with and 500 feet east from the centerline of the Dante's View Highway, Park Route # 30;

thence northwesterly, parallel with and 500 feet northeasterly of said centerline, also being coincident with the old Death Valley National Monument boundary, a point of intersection with the section line between protracted Sections 17 & 18, T.25N., R.3E., SBM;

thence northerly along the section line between protracted Sections 17, 18, 7, 8, 5 & 6, also being coincident with the old Death Valley National Monument boundary to the corner common to protracted Sections 5 & 6, also being on the township line between T.25N. & T.26N., R.3E., SBM;

thence easterly along said township line, also being coincident with the old Death Valley National Monument boundary, to the corner common to protracted Sections 31 & 32, T.26N., R.3E., SBM;

thence northerly along the section line between protracted Sections 31, 32, 29, 30, 19 & 20, also being coincident with the old Death Valley National Monument boundary, to a point 300 feet northerly of the centerline of California State Highway 190;

thence southeasterly, parallel with and 300 feet northeasterly of said centerline to the intersection with the centerline of an unnamed, unpaved road (now a drainage diversion) near elevation point 2950T;

thence bearing northeasterly to elevation point 3900T;

thence bearing northeasterly to elevation point 4758T;

thence northeasterly, along a northeasterly trending ridge line, approximately 2.3 miles to the high point inside the 3320 contour interval being near the terminus of the ridge line, in section 9, T.26N., R.4E.;

thence southeasterly to a point 50 feet northerly of the centerline of the terminus of an unnamed road by an unnamed prospect located approximately 0.25 miles northwesterly of elevation-point 2600T;

thence southeasterly, changing to easterly, changing to easterly, changing to northeasterly, parallel with and 50 feet northerly of the centerline of an unnamed, unpaved road to a point of intersection with the range line between R.4E. & R.5E., T.26N., SBM, also being the west section line of Section 6, T.26N., R.5E., SBM;

thence northerly along said range line to the corner common to Sections 1, 6, 31 & 36, T.26N. & T.27N., R.4E. & R.5E., SBM, also being the township line between T.26N. & T.27N., R.4E.;

thence westerly along said township line between Section 36 T.27N., R.4E., SBM, and protracted Section 1 T.26N., R.4E., SBM to the protracted corner of Sections 35 & 36 T.27N., R.4E., SBM, and protracted Sections 1 & 2, T.26N., R.4E., SBM;

thence northerly between Sections 35 & 36 and 25 & 26, passing through the historic Scranton Station grounds to a point 50 feet southerly of the centerline of the dismantled, historic Tonopah & Tidewater Railroad line, also being R4270 & S020133, the R/W and Scranton Station Grounds;

thence northwesterly, parallel with and 50 feet southwesterly of the centerline of the historic Tonopah & Tidewater Railroad Line, also being R 4270, R/W of the Tonopah & Tidewater RR, to a point of intersection with the State boundary line between California and Nevada, which is the **POINT OF BEGINNING.**

**PARCEL NO. 2**

**Devils Hole Detached Management Unit**

The SW 1/4 of SE 1/4 of Section 36, T.17S., R.50E. MDM, in the state of Nevada.

**END OF DESCRIPTION**

**APPROVED 3/27/96**

# B-2. UNPATENTED MINING CLAIMS, DEATH VALLEY NATIONAL PARK

| Claimant | Claim Group | Number of Claims | Lead BLM Serial Number | Location (MD & SB B&M) Township | Range | Sec. | Acres (approx.) | Comments |
|---|---|---|---|---|---|---|---|---|
| Milovich | Zlato No.1 | 1 | 231923 | 8S | 39E | 2 | 20 | Lode |
| Sweet | Crater Grp. | 16 | 109868 | 8S | 39E | 33, 34 | 331 | Lodes |
| Cook | Storm Cloud | 2 | 240316 | 9S | 39E | 15, 17 | 41 | Lodes |
| Burgess / Striegel | Joe Ward | 2 | 104688 | 10S | 37E | 7 | 41 | Placers |
| Braden | Bonnie/ Newcastle | 3 | 26249 | 10S | 37E | 31 | 62 | |
| Blair & Hill | Morning Star/Pine Tree | 6 | 38042 | 11S | 37E | 2,3 | 124 | Lodes |
| Dahl & Haire | Emma | 2 | 86211 | 11S | 37E | 4 | 41 | |
| MacGregor | Windsong | 1 | 254188 | 11S | 37E | 28 | 21 | |
| Dickman | Silver Harvest | 1 | 1667 | 14S | 38E | 4 | 21 | Lode |
| Akin | Morning Sun | 5 | 30408 | 14S<br>15S | 38E<br>38E | 9<br>3 | 56 | 2 lodes, 3 mill sites |
| Ostrenger | Saline Star 117 | 1 | 56565 | 14S | 38E | 10 | 20 | Placer |
| Ostrenger | JO | 11 | 5277 | 15S | 41E | 20-22, 28 | 145 | Wollastonite; exam in progress |
| Dahl | Witte | 1 | 54065 | 16S | 39E | 14 | 21 | |
| Ostrenger | Silver Streak | 2 | 221603 | 17S | 40E | 25 | 41 | Lodes |
| Hollingsworth | Mothers Day | 1 | 119722 | 18S | 41E | 11 | 20 | Lode |
| Kummerfeld | Corona | 2 | 38439 | 20S | 44E | 14 | 41 | Panamint Mts. |
| Ostrenger | Jacob' s Wonder Silver Series | 7 | 101019<br>21391 | 21S | 45E | 10 | 56 | 3 Mill sites/4 Lodes Near Panamint |
| Lagrande Oro Mining Co. | Aaron Bluejay | 2 | 39754 | 21S | 45E | 11 | 41 | Lodes |
| North American Tree | New Surprise Valley | 1 | 263487 | 21S | 45E | 11 | 5 | Mill site |
| Hewlett & Moody | Moody | 6 | 272950 | 21S | 45E | 15, 16, 21, 22 | 124 | |
| Bradford | Evening | 3 | 261584 | 21S | 45E | 36 | 62 | Panamint Mts. |
| Fox | Alice Jean | 1 | 32679 | 22S | 45E | 22 | 20 | Lode |
| Funkhousen Skalski | Gods Country/ Lightning | 3 | 254093 | 22S | 45E | 26, 27, 35 | 46 | Lightning lode & mill God' s Country Pl. |
| CR Briggs | PN 365 | 1 | 228060 | 22S | 45E | 36 | 21 | |
| Harder | Redlands/ Lone Tree | 2 | 260973 | 23S | 45E | 9,16 | 25 | 1 Lode; 1 Mill site |
| CR Briggs | Briggs 7 & 8 | 2 | 267057 | 23S | 45E | 23 | 41 | |
| Keystone Mining Co. | Keystone | 3 | 64413, 30785 | 24S | 45E | 10, 11 | 46 | 2 lodes; 1 mill site |
| Jackson & Baumunk | Death Valley BBJ | 6 | 52822 | 18N<br>19N | 6E | 5<br>32 | 124 | Exam completed Claims valid |
| Breslin/Hahn | Who Cares #1 | 1 | 60820 | 20N | 5E | 5 | 20 | Lode |
| Laine | Sara | 4 | 262118 | 22N | 6E | 23 | 83 | Lodes |
| Naxos Resources | Arcan | 18 | 14253 | 22 ½N<br>23N<br><br>24N | 6E<br>6E<br><br>6E | 23, 26<br>14, 23, 26, 35<br><br>19 | 372 | Also: 23,24N-6E |
| U.S. Borax | Dixie 109-112 | 4 | 226843 | 24N | 4E | 10 | 83 | May be partially in |
| U.S. Borax | Lila 377 | 1 | 219973 | 24N | 4E | 22 | 1 | |
| R.T. Vanderbilt | Kaolin/ Kingfish | 3 | 24101 | 26N | 4E | 10, 11, 18 | 46 | 2 Lodes; 1 Mill site |
| **TOTALS** | | **125** | | | | | **2262** | |

# B-3. PATENTED MINING CLAIM GROUPS

| NPS Lead Tract # | General Location | Approx. Acres | T | R | SEC |
|---|---|---|---|---|---|
| 04-107 | Gold Bar (Nevada Triangle) | 77 | 11S | 45E | 35, 36 |
| 05-104 | Bullfrog Hills (Nevada Triangle) | 96 | 12S | 45E | 12, 13 |
| 13-103 | Chloride City (northern Funeral Mtns.) | 55 | 30N | 1E | 29 |
| 30-104 | Skidoo (Emigrant Canyon-Panamint Mtns.) | 109 | 17S | 44E | 23, 24, 25 26, 36 |
| 27-105 | Echo Canyon (southern Funeral Mtns.) | 214 | 27N | 2E | 1, 12 |
| 34-109 | Furnace Creek Wash (Zabriskie) | 2935 | 26N<br>26N<br><br><br><br>27N | 1E<br>2E<br><br><br><br>1E | 1, 2<br>5, 6, 7, 8, 9, 15, 16, 17, 20, 21, 22<br>35, 36 |
| 35-112 | Upper Furnace Creek Wash | 61 | 26N | 2E | 12 |
| 35-102 | Upper Furnace Creek Wash (Ryan) | 1006 | 26N | 3E | many |
| no tract # | Upper Greenwater Valley (Black Mtns.) | 410 | 24N | 3E | 34, 35 |
| 42-108 | Mouth of Copper Canyon (Black Mtns.) | 41 | 23N | 2E | 3 |
| 38-107 | Wildrose Canyon | 42 | 19S | 44E | 35, 36 |
| no tract # | Surprise Canyon (Panamint City) | 262 | 21S | 45E | 3, 4, 10, 14, 15, 22, 23 |
| 44-102<br>no tract # | Pleasant Canyon (Panamint Mtns.) | 5<br>70 | 22S<br>22S | 46E<br>45E | 18<br>1, 2 |
| 44-103 | Upper Warm Spring Canyon | 60 | 22S | 46E | 23, 24 |
| 45-106 | Warm Spring Canyon | 101 | 22S | 47E | 31, 32 |
| no tract # | Crystal Hills (southwest Owlshead Mtns.) | 728 | 25S | 47E | 28, 29, 30, 31, 32, 33 |
| no tract # | Northern Ibex Hills | 34 | 21N | 5E | 32, 33 |
| 54-103 | Central Ibex Hills | 5 | 19N | 5E | 2 |
| | **TOTAL** | **6311** | | | |

*AS OF JULY 2000

# B-4. APPROPRIATED WATER RIGHTS RECORDED WITH THE STATE OF CALIFORNIA

Note: This table represents those water rights recorded with the state of California, but is not necessarily a complete collection of water rights that may exist. Many rights may have been recorded with the counties prior to the state recordation process. This list is for information only and does not represent any official recognition of water rights.

| DEVA WATER RIGHTS APP NUM | T | | R | Sec | 1/4 | 1/4 | SOURCE | TRIBUTARY | OWNER NAME | D/D AMT | | USE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| A008183 | 18 | N | 5 | 2 | SW | NW | SARATOGA SPRINGS | DEATH VALLEY | DEATH VALLEY NATIONAL PARK | 4800.000 | G | W, R |
| G363381 | 19 | N | 2 | 21 | NE | SE | | | LESHIN, SOL | | | |
| A010245 | 19 | N | 5 | 2 | NW | NE | IBEX SPRING NO 2 | AMARGOSA RIVER | MORRIS, NEWELL | 200.000 | G | D |
| A010247 | 19 | N | 5 | 2 | NW | NE | IBEX SPRING NO 1 | AMARGOSA RIVER | MORRIS, NEWELL | 200.000 | G | D |
| A010119 | 27 | N | 1 | 23 | NW | NE | UNSP | SALT CREEK | DEATH VALLEY NATIONAL PARK | 0.078 | C | E, D |
| A009510 | 28 | N | 1 | 36 | SW | NE | MAIN COW CREEK | DEATH VALLEY | DEATH VALLEY NATIONAL PARK | 0.045 | C | R, D |
| A012320 | 7 | S | 39 | 21 | NW | NE | WILLOW SPRING | WILLOW CREEK | LIDA LIVESTOCK COMPANY | 3750.000 | G | S |
| F004231S | 8 | S | 39 | 2 | NW | SE | LAST CHANCE SPRING | LAST CHANCE CANYON | | 0.000 | | S, W |
| F004229S | 9 | S | 41 | 7 | SE | SE | SAND SPRING | DEATH VALLEY WASH | | 0.000 | | R, S, W |
| F004230S | 9 | S | 41 | 17 | SW | SE | LITTLE SAND SPRING | DEATH VALLEY WASH | | 0.000 | | R, W, S |
| A019482 | 11 | S | 42 | 24 | NE | SW | RANGER SPRING | UNST | DEATH VALLEY NATIONAL PARK | 7200.000 | G | R, W, D |
| A019538 | 11 | S | 42 | 26 | SE | SE | MESQUITE SPRING | UNST | DEATH VALLEY NATIONAL PARK | 7200.000 | G | I, W, D |
| A021646 | 11 | S | 43 | 13 | NE | SE | UNST | DEATH VALLEY | DEATH VALLEY NATIONAL PARK | 7300.000 | G | D |
| S007383 | 14 | S | 38 | 3 | | SE | MESQUITE WATER HOLE | SALT LAKE | DEATH VALLEY NATIONAL PARK | 0.050 | C | R, W, D |
| F007952S | 14 | S | 39 | 27 | NW | NW | SALINE WELL | SALINE VALLEY | DEATH VALLEY NATIONAL PARK | 0.500 | C | B, C, D |
| S012565 | 15 | S | 40 | 36 | SW | SE | BIG DODD SPRING | SALINE VALLEY | DEATH VALLEY NATIONAL PARK | 0.041 | C | W |
| S008309 | 15 | S | 41 | 33 | SE | SE | SPANISH SPRING | UNST | DEATH VALLEY NATIONAL PARK | 100.000 | G | W |
| A018433 | 15 | S | 42 | 29 | SE | SW | GOLDBELT SPRING | UNST | DEATH VALLEY NATIONAL PARK | 650.000 | G | W, R |
| S012564 | 16 | S | 41 | 32 | SE | NE | MILL CANYON SPRING | MILL CANYON | DEATH VALLEY NATIONAL PARK | 7000.000 | G | S, W |
| S012561 | 16 | S | 41 | 33 | SE | NE | UNSP | MILL CANYON | | 0.027 | C | S, W |
| A005073 | 17 | S | 44 | 27 | NW | NE | LOWER SPRING | EMIGRANT WASH | DEATH VALLEY NATIONAL PARK | 700.000 | G | D |
| A015381 | 17 | S | 44 | 27 | NW | NE | LOWER EMIGRANT SPRING | EMIGRANT WASH | DEATH VALLEY NATIONAL PARK | 2800.000 | G | D |
| A008950 | 18 | S | 41 | 34 | SE | SW | DARWIN WASH | PANAMINT VALLEY | NINNIS, HELEN | 0.053 | C | D |
| A015539 | 18 | S | 44 | 2 | NW | SW | COVERED SPRING/ WEE SPRING | EMIGRANT CANYON | DEATH VALLEY NATIONAL PARK | 100.000 | G | W |
| A013852A | 18 | S | 44 | 2 | NW | SW | BURNS SPRING | UNXX | DEATH VALLEY NATIONAL PARK | 100.000 | G | D |
| A010276 | 19 | S | 44 | 29 | NE | NE | WILDROSE | WILDROSE | DEATH VALLEY | 1500.000 | G | D |

| DEVA WATER RIGHTS APP NUM | T | | R | Sec | 1/4 | 1/4 | SOURCE | TRIBUTARY | OWNER NAME | D/D AMT | | USE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | SPRING | CANYON | NATIONAL PARK | | | |
| A016096 | 19 | S | 45 | 2 | SW | NE | TARANTULA SPRING | TRAIL CANYON | DEATH VALLEY NATIONAL PARK | 4350.000 | G | W |
| A008423 | 19 | S | 45 | 35 | SE | SW | UNSP | WILDROSE CANYON | DEATH VALLEY NATIONAL PARK | 400.000 | G | D |
| S012558 | 20 | S | 44 | 1 | SW | SW | MIDDLE TUBER CANYON | TUBER CANYON | DEATH VALLEY NATIONAL PARK | 0.055 | C | W |
| S012559 | 20 | S | 44 | 10 | NW | NW | LOWER TUBER CANYON | TUBER CANYON | DEATH VALLEY NATIONAL PARK | 0.041 | C | W |
| S012557 | 20 | S | 44 | 13 | NE | SE | JAIL CANYON | PANAMINT VALLEY | DEATH VALLEY NATIONAL PARK | 0.138 | C | W |
| A012245 | 20 | S | 44 | 14 | NW | SE | JAIL CANYON | PANAMINT VALLEY | KUMMERFELD, KEITH | 0.110 | C | D, B |
| A014766 | 20 | S | 44 | 14 | NW | SE | JAIL CANYON | PANAMINT VALLEY | KUMMERFELD, KEITH | 0.500 | C | P |
| S009067 | 21 | S | 45 | 21 | | | HAPPY CANYON | PANAMINT VALLEY | MOODY, DAVID | 3750.000 | G | B |
| S012556 | 21 | S | 45 | 9 | SW | SW | BREWERY SPRING | SURPRISE CANYON | DEATH VALLEY NATIONAL PARK | 0.138 | C | R, W |
| S007378 | 21 | S | 45 | 10 | | | SOURDOUGH CANYON | SURPRISE CANYON | DEATH VALLEY NATIONAL PARK | 0.050 | C | D, R, W |
| A003269 | 21 | S | 45 | 11 | SE | NE | WATER CANYON | PANAMINT VALLEY | LA GRANDE ORO MINING CO. LTD | 0.060 | C | B, D |
| S006355 | 21 | S | 45 | 11 | SW | NE | WATER CANYON | SURPRISE CANYON | DEATH VALLEY NATIONAL PARK | 100.000 | G | D, R, W |
| S007379 | 21 | S | 45 | 11 | NE | SW | SLAUGHTER HOUSE SPRINGS | WATER CANYON | DEATH VALLEY NATIONAL PARK | 0.050 | C | D, W, R |
| A010179 | 24 | S | 45 | 11 | NE | SW | SOURDOUGH SPRINGS | UNST | KEYSTONE MINING COMPANY | 470.000 | G | B, D |
| A026173 | 24 | S | 45 | 11 | NW | SW | SOURDOUGH SPRINGS | UNST | KEYSTONE MINING COMPANY | 0.110 | C | B, D |
| A010139 | 24 | S | 45 | 12 | SW | NW | UNSP | PANAMINT WASH | MYERS, BARBARA | 0.025 | C | D |
| S012553 | 24 | S | 46 | 6 | SW | SE | SOUTH BURRO SPRING | GOLER WASH | DEATH VALLEY NATIONAL PARK | 900.000 | G | W |
| S012554 | 24 | S | 46 | 9 | NE | SW | MYSTERY SPRING | WINGATE WASH | DEATH VALLEY NATIONAL PARK | 900.000 | G | W |

*Information provided by U.S. Borax:

Naval Springs, dated May 12, 1906, and recorded June 28, 1906 in Volume "A," Land and Water Claims, p. 497, records of Inyo County, California.

**RECORD TYPES**

A - APPLC - APPROPRIATIVE
D - SMDOM - SMALL DOMESTIC REG
F - FEDRL - FEDERAL FILINGS (RESERVATION RIGHT)
G - GRWTR - GROUNDWATER RECORDATION
S - STATE - STATEMENT OF DIV & USE

**USE TYPES**

B - MINING
C - MILLING
D - DOMESTIC

E - FIRE PROTECTION
I - IRRIGATION
J - INDUSTRIAL
K - INCIDENTAL POWER
P - POWER
R - RECREATIONAL
S - STOCKWATERING
W - FISH & WILDLIFE PROTECTION AND / OR ENHANCEMENT

**OTHER ABBREVIATIONS**
UNSP - UNNAMED SPRING
UNST - UNNAMED STREAM
UNXX - OTHER
S - SAN BERNARDINO BASE & MERIDIAN
C - CFS - CUBIC FEET PER SECOND; 646, 317 GALLONS PER DAY (GPD)
G - GPD - GALLONS PER DAY; 1.55 CFS
DD - DIR/DIV - DIRECT DIVERSION